

CURRICULUM VITAE



Name : Dr. Amit Arora

Date of Birth : 07.12.1977

Father's Name : Late T.R Arora

Mother's Name : Late Sudharshan Kumari

Languages Known : English, Hindi, Punjabi

Present Address : Department of Chemical Engineering
National Institute of Technology Hamirpur
Hamirpur Himachal Pradesh
India- 177005

Permanent Address : House No.-1215, Sector-26,
Panchkula, Haryana,
India - 134116.

Contact Number : 8427672776
6283140167

Email Address : dr.amitarora@nith.ac.in
aroraamitlse@yahoo.com
aroraamitlse@gmail.com

ACADEMIC QUALIFICATIONS

S. No	Degree	Branch / Specialisation	Institution /University/Board	Month & Year of Passing	Percentage of Marks / Grade Obtained
1.	Ph.D.	Chemical Engineering	Indian Institute Of Technology , Roorkee	July,2016	A
2.	M.Tech	Environmental Science And Engineering	SBSCET Ferozepur /Punjab Technical University , Jalandhar	August, 2011	78.4%
3.	B.Tech	Chemical Engineering	BCET Gurdaspur/ PTU, Jalandhar	June, 2000	75.3%
4.	HSSC (12 th)	Non- Medical	DAV College, Chandigarh/ CBSE	May, 1995	64%
5.	SSC (10 th)	Maths , Science, Social Studies, English, Hindi, Sanskrit, Punjabi	DAV School, Ropar/ PSEB	June, 1993	83.5%

DETAILS OF THESIS

Courses	Title of the Project / Thesis	Brief Details
M.Tech.	Assessment of lifetime fatality risk due to indoor radon concentration in the dwellings of Bathinda district of Punjab	The radon concentration for cemented and uncemented for ten villages of Bathinda district was measured and further the lifetime fatality risk was also calculated.
Ph.D.	Influence of Surfactants on the Formation and Dissociation of Gas Hydrates in Fixed Bed media.	The formation, dissociation and inhibition of gas hydrate was studied in fixed bed media. Gas hydrate amounts to be double than fossil fuel, hence they are considered as future generation fuel. In this thesis a thorough investigation was carried out for their formation as well as dissociation of gas hydrates. Gas hydrate are not seen only as

		energy candidate rather hydrate can be used for carbon capture, natural gas storage and transportation etc., .hence in current thesis hydrates of methane, carbon dioxide oxide and natural gas were formed and then dissociated .The study on the role of microbes for the formation of hydrates was also carried out depicting the mechanism of their formation at real gas hydrates sites.
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PROFESSIONAL EXPERIENCE

S. No	University/College/ Research/ Industry	Designation	Period		Total
			From	To	
1	National Institute of Technology Hamirpur	Associate Professor(Chemical Engineering) & HOD Chemical Engineering	31 st August 2023	Till Date	----
2	SBS State University, Ferozepur Punjab, 152004 (Formerly SBS State technical campus, Ferozpur)	Associate Professor(Chemical Engineering)	12 th October, 2015	30 th August 2023	7 years & 8 months
3	SBS State Technical Campus, Ferozepur Punjab, 152004	Professor (Chemical Engineering)	Due under CAS since 12 th October , 2018	--	--
4	SBS State Technical Campus, FerozepurPunjab, 152004	Assistant Professor (Chemical Engineering)	12 th October,2012	11 th October,2015	3 years
5	SBS College of Engineering & Technology, FerozepurPunjab -152004	Assistant Professor (Chemical Engineering)	01 st January,2006	11 th October,2012	6 years & 10 months
6	SBS College of Engineering & Technology, FerozepurPunjab -152004	Lecturer (Chemical Engineering)	11 th October,2001	31 st December,2005	4 years & 2 months

RESEARCH AND DEVELOPMENT EXPERIENCES

S. No.	Institution	Duration	Type of work
1.	NIT Hamirpur	31 st August- Till date	Writing R&D Projects
2.	SBS State University, Ferozepur Punjab 152004	March 2022 to 30 th August 2023	Deputy Dean Research and Development
3.	SBS State University, Ferozepur, Punjab 152004	August 2016 to till date	Guiding Research Student
4.	IIT Roorkee	January 2013 to December 2015	Research Scholar
5.	NCL Pune (CSIR)	On regular basis between January 2013 to December 2015	Research Scholar

SPONSORED PROJECTS COMPLETED

Title	Sponsoring Agency	Year	Details of Project	Responsibility	Amount Sanctioned	Status
Development of Thermo Catalytic Technique for Gas Production from Hydrate Bearing Sediments.	Oil and Natural gas Corporation (ONGC), India	2017-2022	In this project an attempt has been made to design a commercial novel and viable technology for the dissociation of gas hydrates which are consider that future generation fuel as there amount is more than double be fossil fuels	Co-Cordinator	Rs 1.77Crores	Completed on 30 th January 2022.

AREA OF SPECIALISATION

- Unconventional Energy Resources (Gas Hydrates)
- Hydrogen Storage
- Carbon Dioxide Capture and Sequestration
- Transportation and Storage of Natural Gas
- Gas Separation
- Flow through Porous Media
- Flow Assurance
- Waste to Energy
- Waste Valorisation
- Biofuels and Bioenergy
- Biomass conversion and utilisation
- Pyrolysis
- Biomass Gasification
- Applied Microbiology
- Bio coal
- Bio pesticides
- Bio fertilizers
- Bio Concrete
- Bio Lubricants
- Sustainable Coatings
- Human Implants
- Water and wastewater treatment
- Membrane technology
- Adsorption
- Nanotechnology
- Domestic Radioactivity as a cause of Lung Carcinoma Target Drug Delivery
- Target Drug Delivery

PUBLICATIONS

Papers Published SCI / SCOPUS Journals (Annexure I& II)			
SCI		SCOPUS	
26		27	
First and corresponding Author	Co-Author(Supervisor)	First Author	Co-Author(Supervisor)
10	16	15	12
TOTAL PAPERS = 53			
Publishers Covered :Elsevier, Willey, Springer, ASME (American Society of Mechanical Engineers.), MDPI, Nature,SAGE, WALTER DE GRUYTER, NISCAIR-CSIR.			

	PATENTS (Annexure-III)
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GRANTED	PUBLISHED	APPLIED	TOTAL
3	----	2	5

Book Chapter Published (Annexure IV)		
First and Corresponding Author	Co-Author	Total
1	5	7
Publishers Covered : Springer, Wiley, IGI Global, NIRE		
Book Titled : Insight of formation and dissociation of gas hydrates: Challenges and Solutions is about to be submitted to Springer soon for publications.		

Papers Published in International / National Conference Proceedings (Annexure-V)		
International	National	Total
13	17	30

Oral / Posters Presented in International and Conferences (Annexure-VI)		
On Gas Hydrate	On other fields	Total
23	65	88

Chairing Session/ Plenary and Invited Talks in Conferences/ Institutes (Annexure-VII)		
On Gas Hydrate	On Other Fields	Total
11	22	33

Papers Under Review/ Submitted/ Ready for Submission in SCI Journals (Annexure-VIII)
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On Gas Hydrate	On Other Fields	Total
4	5	9

Global Institutes Research Collaborations (Annexure-IX/X)								
UK	Poland	China	Australia	Denmark	Ireland	Czech Republic	Netherlands	Total
4	14	1	1	2	1	1	1	24

Research Guidance (Annexure-XI)				
Ph.D.			M.tech/M.Sc/M.S.	
Awarded	Thesis Submitted	Going on	Awarded	Going on
8	---	3	14	1

STC/FDP/CONFERENCES/WORKSHOP CONDUCTED (Annexure-XII)			
STC/FDP	CONFERENCES	WORKSHOPS	Total
3	1	3	7

STC/FDP/WORKSHOP ATTENDED (Annexure-XIII)			
One week	Two week	Few Days	Total
18	7	5	30

EDITORIAL BOARD MEMBER

S. No	Journal	Publisher	Year	Role
1	Pollution Research (ISSN 0257-8050) (UGC-CARE List Group A + Scopus)	EM International	10 th August 2019 till date	Editorial board member

2	Nature Environment and Pollution Technology (ISSN 0257-8050) (UGC-CARE List Group A + Scopus)	Techno science	8 th September 2019 till date	Editorial board member
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REVIEWER EXPERIENCE

S.No	Journal / Conference	Publisher	Year	No. of reviews
1.	Materials Today : Proceedings	Elsevier	2020	2
2.	Energy	Elsevier	2020	1
3.	Energy	Elsevier	2021	2
4.	Materials Today : Proceedings	Elsevier	2021	2
5.	Materials Today	Elsevier	2021	1
6.	Materials Today : Proceedings	Elsevier	2022	1
7.	1st International Conference in Fluid, Thermal and Energy Systems- 2022, NIT Calicut 9th -11th June , 2022	Elsevier, Springer, Wiley	2022	3

SCIENTIFIC ADVISORY BOARD

1. Member of Scientific Committee of II edition of the XII Conference Young Scientists in Power Engineering (YPE) on 9th- 11th of December 2020 at Wroclaw University of Science and Technology, Poland.
2. XXIV International Symposium on Combustion Processes (ISCP 2019), Wroclaw, Poland from 23rd September 2020 to 25th September 2019.
3. ATAL ADVISORY BOARD Member Reputed Academia of Atal Advisor Board (AAB) of Atal Tinkering Lab of Dass and Brown World School, Ferozepur from 18th sept 2019 to till date.

ADMINISTRATIVE EXPERIENCES

S. No.	POSITION HELD	PERIOD	
		FROM	TO
1.	Dean Students Welfare (DSW)	30 th May,2019	08 th Nov,2021
2.	Dean Academics (Affiliation and Approvals)	11 th Aug,2016	30 th May,2019
3.	Co-Dean (External Affairs) of Youth Exchange program of Foreign Universities	4 th March,2020	30 th August 23
4.	Deputy Dean Research and Development	4 th March,2022	30 th August 23
5.	Member Expert National Innovation &Start-ups Policy (NISP) of institute	29 th June,2021	30 th August 23
6.	Chairman Medical Committee	17 th Dec,2018	30 th August 23
7.	Chairperson International Admission Committee	23 rd May,2022	30 th August 23
8.	Chairperson Entrepreneurship Cell (E- Cell)	15 th Nov,2017	09 th April,2021
9.	Chairman Online Grievance Committee	11 th July,2019	08 th Nov,2021
10	Chairman Discipline Committee	18 th July,2019	08 th Nov,2021
11	Chairman Social Media Champion Committee (SMC)	22 nd July,2019	1 st April,2021
12	Nodal Officer Ek Bharat Shresht Bharat (EBSB)	22 nd Jan,2020	30 th August 23
13	Nodal Officer Red Ribbon Club (RRC)	27 th July,2018	30 th August 23
14	Officer In-Charge Dispensary	17 th Dec,2018	30 th August 23
15	Member Board of Studies (BOS) for the Department of Chemical Engineering	14 th Dec,2017	30 th August 23
16	Member Board of Studies (BOS) for the Department of Chemical Engineering, Beant College of Engineering and Technology, Gurdaspur.	04 th Feb,2020	30 th August 23
17	Member Departmental Quality Assurance Committee (DQAC)	08 th Sept,2016	30 th August 23
18	In-Charge Chemical Engineering Students Society (CHESS)	21 st Jan,2016	30 th August 23
19	Lab In-Charge of Chemical Technology Lab	04 th Oct,2017	30 th August 23
20	In-Charge Society for Extra-curricular Activities (SECA)	10 th April,2017	15 th Jan,2021

21	Editor English section for Institute Magazine (Manthan)	26 th Feb,2016	31 st March, 2021
22	Co-Coordinator Society of Extra Curricular Activities (SECA)	16 th Feb,2016	31 st March,2017
23	SPOC Member for Smart India Hackathon 2018	29 th Nov,2017	31 st March,2017
24	SPOC Member for Smart India Hackathon 2020	11 th Dec,2019	31 st March,2020
25	Member Internal Quality Assessment Committee (IQAC)	21 st March,2018	1 st April,2021
26	Member Internal Quality Assurance Committee (IQAC)	9 th Jan,2019	1 st April,2021
27	Member Academics Council of the Institute	20 th Feb,2018	1 st April,2021
28	Member Anti- Ragging Committee	18 th July,2019	08 th Nov,2021
29	Member Women Grievance Cell / Saksham Committee	18 th July,2019	6 th April,2021
30	Member Online Grievance Committee	8 th Jan,2020	8 th Nov,2021
31	Member Equal Opportunity Cell for meeting day-to-day needs of people	11 th Dec,2019	30 th August 23
32	Counsellor of 2016 Batch	18 th July,2018	31 st June,2020
33	Counsellor of 2013 Batch	28 th Jan,2016	31 st June,2017
34	In-Charge Heat Transfer Lab	21 st Jan,2016	04 th Oct,2017
35	In-Charge Time Table (CHE)	29 th Aug,2007	31 st Dec,2012
36	In-Charge Block C	27 th May,2010	31 st Dec,2012
37	Training and Placement Officer	28 th March,2011	31 st Dec,2012
38	FI (IPRC and IIEC)	18 th December 2023	Till Date
39	Coordinator QIP	14 th February 2023	Till Date
40	Convenor DDPC	23 rd October 2023	Till Date
41	Member DMPC	23 rd October 2023	Till Date
42	Member DBPC	23 rd October 2023	Till Date
43	OIC (Training & Placement)	23 rd October 2023	Till Date
44	HOD (Chemical Engineering)	24 th July 2025	Till Date

OTHER WORK EXPERIENCE

S.No.	TYPE OF WORK
1.	Superintendent External University Exams for conducting of Re-appear examination for May 2016-2017
2.	Coordinator, SVEEP SBSSU, Ferozepur for State Legislative Election-2017, State Legislative Election-2022
3.	Deputy Superintendent External University Exams for conducting of Re-appear examination for May 2020-2021
4.	Nodal Officer, SVEEP SBSSU, Ferozepur for State Legislative Election-2022
5.	Member Fee Refund Committee (For Session 2019-20, 2020-21, 2021-22).
6.	Special invitee as Ex-DSW for meeting of Student aid fund (SAF) and student exigency fund (SEF) for Jan – June 2021 cases.
7.	Member for making guidelines and ordinance for courses of our university i.e. B.tech, M.tech, B.Arch, BCA,MCA, PGDCA, P.hd, etc. for the session August 2023 onwards.
8.	Chairman for verification for admissions August 2022 session B.tech , M.tech ,B.Arch, BCA ,MCA, PGDCA
9.	Member for verification for admissions August 2022 session PhD
10.	As a Chairperson E-Cell a startup PAGISTNATION is under development stage of two B.Tech final year students Raghav Watts and Mohit Lamba .

MoU

S. No.	Name of Office	MOU Between	Activities
1.	DSW	Between SBSSTC and Disha Foundation Welfare Society, Faridkot.	For providing various health related facilities for SBSSTC, Ferozepur faculty staff, their families and students on 10/9/2019 to till date.
2.	Incharge SECA	Between Society of Extra Curricular activities (SECA) SBSSTC, Ferozepur and R2MI Ventures Private Limited, Bangalore.	For giving sponsorship for various extracurricular activities on 5/7/2019 to till date.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

S.No.	Name of the Society	Details of Membership	Nature of Tech. activities done through the society	Remarks
1.	Indian Institute of Chemical Engineering	Life time membership since	a. Organize International conference b. journal Publication i.e., Indian chemical engineering by Taylor and Francis c. Organizing student chapter	The impact factor of the journal is 1.091
2.	Indian Society for Technical Education	Life time membership since	a. ISTE journal Indian journal of technical education b. Publication of ISTE news Letter c. Organizing student chapter	A word renowned body for technical education
3.	Punjab Academy of Science	Life time membership since	a. Publication of journal Punjab Academy of Sciences. b. Organizing state level conference	Promotion of sciences and state

AWARDS/ HONOURS

a. Academic Achievement s and Awards	I Awarded Consolation Prize by presenting poster titled “Effects of Zeolites on Carbon dioxide Hydrate Formation”, International Seminar on Nanotechnology in Conventional and Alternate Energy Systems a Global Status and Ahway, Aug 12th-13th,2013 at UPES Campus, Dehradun, India Conducted by Indian Oil, R&D, ONGC, CSIR India. 11. Best Paper Award by presenting the poster paper titled “Carbon Dioxide Hydrate Formation in Fixed Bed and Stirred Tank Reactor System” in 6th World Renewable Energy Technology Congress, Aug 21st- 23rd, 2015, New Delhi, India. III First Prize for presenting poster entitled “Influence of Bio surfactants on Gas Hydrate Formation” at Chandigarh University on National Seminar on Sustainability of New & Renewable Energy A Present Scenario (SUNREAPS-2015), April 17th, 2015, Sponsored by Ministry of New & Renewable Energy, New Delhi. V. 3rd Prize in Technoopus 2015 for Presenting a Project Titled: Production of Biopesticides Namely Trichoderma Viride, Beauveria Bassiana And Verticillium Lecanii. by my Project Student Pravajot And Kasish Chandna. VI. Award of Honour as a scientific advisor of the PhD student that was the author participating in the contest for the “Best PhD Student Poster” of at XXIV International Symposium on Combustion Processes, 23rd – 25th of September 2019 in Wroclaw, Poland. The work was titled “Membrane separation as an innovative way of water separation from liquid by-products of HTC of agricultural digestate”. The work received the 1st runner up award in this contest. VII. Member of award committee at the Renewable Energy Sources - Research and Business RESRB 2017 conference held on June 19-21, 2017, Wroclaw, Poland. VIII. One team of Student smart India Hackathon Project 2018 (in top 10) at Indian level---- College SPOC member- SPOC member for smart India AICTE Hackathon 2018 since 29-11-2017.to till date. IX. Certificate of Appreciation as Co-coordinator for organising AICTE sponsored National Seminar on Clean Energy Technologies at SBSSTC, Ferozepur on 07/11/2017.
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	X. Award of Honour as a co-author of the awarded work titled “Valorisation of wet residues of brewing processes using hydrothermal carbonization”, which has received the award for the winner of the contest for the “Best PhD Student Poster” at XXIV International Symposium on Combustion Processes, 23rd – 25th of September 2019 in Wroclaw, Poland. XI. Appreciation Certificate as coordinator for conducting one-week AICTE sponsored programme on Mathematical methods and Computations in Engineering (MMCE-2019) at SBSSTC, Ferozepur from 1-6th July 2019. XII. Certificate of Appreciation for Outstanding work as a Member of Scientific Committee of II edition of the XII Conference Young Scientists in Power Engineering (YPE) on 9th- 11th of December 2020 at Wroclaw University of Science and Technology, Poland. XIII. Second Prize was awarded to one of my Ph.D student at Research Conclave 2021: Entrepreneurship and start-ups paradigms of future research by Department of Science and Technology and renewable energy, Chandigarh held on 24th – 25th September, 2021. XIV. Best Promising Chemical Engineering Teacher Award For An Outstanding Chemical Engineer for the year 2024 by Indian Institute of Chemical Engineers on 27-12-2024.
b. Social Achievements and awards	1. ChESS was awarded 3rd Prize for overall performance in the annual function i.e. JASHAN 2k16. 2. Appreciation Award for organising Independence Day on 15/08/2017. 3. Appreciation Award by Deputy Commissioner cum District Election Officer (SVEEP Basant Mela-2017) 4. Appreciation Award by Deputy Commissioner cum District Election Officer, Ferozepur for Contributing under Systematic Voter’s Education and Electoral Participation (SVEEP Basant Mela-2017) from 06/12/16 to 31/01/17 for Legislative Assembly Elections 2017, Punjab. 5. Distinctive performance in organizing Independence Day from NSS in organizing Independence Day held on 15th AUG 2017 at SBSSTC FZR. 6. Appreciation Award by Department of Youth Services, Government of Punjab for Organising Social Activities like Rallies and Drug De addiction Seminar, Poster Making Competition on AIDS Awareness, Regularly Conducting Blood Donation Camps. Sending Deserving Students to Youth Leadership Camps/ Hiking Trekking Camp for the Year 2017-2018 on dated 05/02/2018 7. Appreciation Award for the hard work done for getting admission in the institute for the year 2018-2019, Dated 12/10/2018

	8. Appreciated as Coordinator for organising Free Fat Check-up Camp and Health Awareness Seminar by Herbalife Nutrition Independent Associate, on 04/10/18 9. Appreciation Award from Director SBSSTC Ferozepur as Dean Academics Affiliation and Approval for transferring the university from MRSPTU, Bathinda to IKG PTU, Jalandhar. Dated 13/09/2018 10. Appreciation award from Director SBSSTC, Ferozepur as In charge Society of Extra Curricular Activities (SECA) for conducting many Extra Curricular Activities regularly, Dated 13/09/2018 11. Appreciation Award as Dean Students' Welfare, SBSSTC, Ferozepur by Youth Services Department, Faridkot and Ferozepur, Government of Punjab for Coordinating Mega Blood Donation Camp of 550 units on the occasion of celebration of 550th Prakash Purab of honourable Shri Guru Nanak Dev Ji on 06/12/2019 at Government Brijindra College, Faridkot. 12. Appreciation Award by Cabinet Minister of Youth Services and Sports, Government of Punjab on the occasion of Celebration of 550th Prakash Purab of honourable Shri Guru Nanak Dev Ji on 08/02/2019 for arranging a Mega Blood Donation Camp of 550 units and plantation of 550 trees at Shaheed Udham Singh College, Guruharsahai, Dist. Ferozepur. 13. Award of Appreciation as Nodal Officer Red Ribbon Club by Youth Service Department, Ferozepur, Government of Punjab for conducting various social activities Activities Blood Donation Camps etc. and co-ordinating interstate historical events for the year 2018-19 on dated 05/07/2019. 14. Certificate of appreciation by District Administration, Ferozepur under SVEEP for participating in Ferozepur Voter's awareness cycle rally on 11/05/2019. 15. Certificate of appreciation as in charge SECA for conducting welcome party that is NOVATO FIESTA 2018, on 10/10/2019 Successfully 16. Appreciation letter for conducting various activities related to Birth Anniversary of Shri Guru Nanak Dev Ji as nodal officer RRC .Dated: 24/09/2019. (Page No: 397). 17. Appreciation Letter for conducting various activities related to Birth anniversary of Shri Guru Nanak Dev ji as nodal officer RRC on Dated 07/11/2019 18. Appreciation award for conducting Annual function JASHAN 2k19 successfully held on 14/03/2019- 15/03/19 19. Award of Appreciation as Nodal Officer Red Ribbon Club by Youth Service 6th Dec 2019
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	20. Appreciation Award as Dean Students' Welfare, SBSSTC, Ferozepur by Youth Services Department, Faridkot and Ferozepur, Government of Punjab 30st Jan 2020 to 31st Jan 2020. 21. Appreciation certificate from Minister of Technical Education and Industrial Training, Government of Punjab as Dean Students' Welfare, SBSSTC, Ferozepur in the field of Cultural Activities, Blood Donation and Drug de addiction campaign for the year 2019-20 on Republic Day 26/01/2020. 22. Appreciation Certificate from Department of Youth Services, Government of Punjab, as an organiser for Punjab Youth Festival held at Chandigarh University, Gharuan from 30/1/2020 to 31/1/2020 for Ferozepur/Faridkot district. 23. Letter of Appreciation by District Legal Services Authority Pan India Awareness and outreach camp by 2.11.2021. 24. Certificate of Appreciation for valuable services 77-Firozepur Rural (SC) during Punjab Assembly Elections 2022, by returning officer cum ADC(G), Ferozepur.
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REFERENCES

Dr. (Proff) C.B.Majumder
 Dept. of Chemical Engineering
 IIT, Roorkee
 India - 247667
chandfch@iitr.ac.in

Dr(. Prof.) H. M. Suryawanshi
 Director
 NIT Hamirpur
 Himachal pardesh-177005
director@nith.ac.in

VERIFICATION

It is certified that the above noted information is true and correct to the best of my knowledge and belief.

(Amit Arora) Date: 27th July 2025

PAPERS PUBLISHED IN SCI/ SCOPUS JOURNALS:

1. Amit Arora, Pushpendra Kumar, Asheesh Kumar, Gaurav Bhattacharjee, Pushpendra Kumar Chandrajit Balomajumder, “Effect of Different Fixed Bed Media on the Performance of Sodium Dodecyl Sulfate for Hydrate based Carbon dioxide Capture”, *Journal of Material and Design*, 90:1186-1191, 2016. DOI: . Impact factor (8.4).
2. Amit Arora, Pushpendra Kumar, Rajnish Kumar, Chandrajit Balomajumder, Anil Kumar Singh, Swaranjit Singh Cameotra, B. Santhakumari, and Sukumar Laik, “Biosurfactant as a Promoter of Methane Hydrate Formation: Thermodynamic and Kinetic Studies”, *Scientific Reports - Nature Journal*, 6(20893): 1-13, 2016.DOI: 10.1038/srep20893. Impact factor (4.6).
3. Anupama Kumari, Shadman Hasan Khan, A.K. Mishra, C.B. Majumder, Amit Arora, “Hydrates of Binary Guest Mixtures Fugacity: Model Development Model and Experimental Validation”, *Journal of non-equilibrium thermodynamics*, 45(1): 39-58, 2019.DOI: . Impact factor (6.6).
4. Halina Pawlak-Kruczek-kruczek, Amit Arora, Krzysztof Moscicki, Krystian Krochmalny, Shalvin sharmae, Lukasz Niedzwiecki, “Atransition of a domestic boiler from coal to biomass – Emission from combustion of raw and torrefied Palm Kernel shells (PKS)”, *Fuel* , 263(16718): 1-9, 2020.DOI: . Impact Factor (7.4).
5. Halina Pawlak-Kruczek, Amit Arora, Ashish Gupta, Muhammad Azam Saeed, Lukasz Niedzwiecki , Gordon Andrews, Herodotos Phylaktou, Bernard Gibbs, Anna Newlaczył, Penelope M. Livesey, “Biocoal - Quality control and assurance”, *Biomass and Bioenergy*, 135: 1-15, 2020. DOI: . Impact factor (6).
6. Mateusz Jackowski, Lukasz Niedzwiecki, Magdalena Lech, Mateusz Wnukowski, Amit Arora, Monika Tkaczuk Serafin, Marcin Baranowski, Krystian Krochmalny, Vivek K Veetil, Przemysław Seruga, Anna Trusek, Halina Pawlak-Kruczek, “HTC of wet residues of brewing process comprehensive characterization of produced beer, spent grain and valorized residue”, *Energies*, 13(2058): 1-20, 2020.DOI : 10.3390/en13082058. Impact factor (3.2).
7. HaoLuo, Lukasz Niedzwiecki, Amit Arora, Krzysztof Mo’scicki, Halina Pawlak-Kruczek, KrystianKrochmalny , MarcinBaranowski , MayankTiwari, Anshul Sharma, Tanuj Sharma, Zhimin Lu, “Influence of Torrefaction and Pelletizing of Sawdust on the Design Parameters of a Fixed Bed Gasifier”, *Energies*, 13(3018): 1-19, 2020.DOI:10.3390/en13113018. Impact factor (3.2).
8. Shadman H. Khan, A K Misra, C B Majumder, Amit Arora “Hydrates dissociation using Microwaves, Radio Frequency and Ultrasonic Radiation& Plasma Techniques”, *ChemBioEngg*, 7(4): 1-18, 2020. DOI: 10.1002/cben.202000004. Impact Factor (4.8)
9. Amit Arora, Swaranjit Singh, Cameotra, Chandrajit, Balomajumder, RajnishKumar, Anil Kumar Singh, B. Santha Kumari, “Combination of Silica Gel and Surfactin Promoting Methane Hydrate Formation”, *Journal of Energy Resources Technology*, (American Society of Mechanical Engineer , ASME , 143:102302-110 , 2020 DOI: . Impact Factor (3.0)

10. Anupama Kumari ,Shadman HashanKhan,C.B.Majumder, Amit Arora , Gaurav Dixit, “Physio-Chemical and Mineralogical Characteristics of Gas Hydrate-Bearing Sediments of Andaman Basin”,*Marine Geophysical Research*, 42(2): 1-12, 2020.DOI: doi.org/10.1007/s11001-020-09423-9. Impact factor (1.4).
11. Shadman H.Khan, Anupama Kumari, A.K. Mishra, Chandrajit B. Majumder, Amit Arora, “Thermodynamic modeling and correlation of CH₄, C₂H₆, CO₂, H₂S, and N₂hydrates with cage occupancies”, *Journal of Petroleum Exploration and Production Technology*, 10: 3689-3709 , 2020. DOI: . Impact Factor (2.2).
12. Mateusz Jackowski , Lukasz Niedzwiecki, Krzysztof Moscicki, Amit Arora, Muhammad Azam Saeed, Krystian Krochmalny, Jakub Pawliczek, Anna Trusek, Magdalena Lech, Jan Skrinsky, Jakub Cespiva, Jan Veres, Tadeas Ochodek, Halina Pawlak-Kruczek, “ Synergetic co-production of beer colouring agent and solid fuel, usingBrewr’s spent Grains in the Circular Economy Preespective”, *Sustainability*, 13(10480): 1-7, 2021. DOI: https://doi.org/10.3390/su131810480. Impact factor (3.9).
13. Tomasz Hardy , Amit Arora, Halina Pawlak Kruczek, Wojciech Rafajlowicz , Jerzy Wietrzyk, Lukasz Neid zwiecki , Vishwajeet and Krzysztof Moscicki, “Non-Destructive Diagnostics Methods for Fire-Side Corrosion Risk Assessment of Industrial Scale Boilers, Burning Low Quality Solid Bio fuels- A Mini Review”, *Energies*; 14(1320) :1-15, 2021. DOI: .Impact Factor (3.2).
14. Amit Arora, Asheesh Kumar, Gaurav Bhatta charjee, Chandrajit Balomajumder, Pushpendra Kumar, “Hydrate Based Carbon Capture Process:Assessment of Various Packed Bed Systems for Boosted Kinetics of Hydrate Formation”, *Journal of Energy Resources Technology*, (American Society of Mechanical Engineer , ASME), 03090(143) : 1-7, 2021. DOI: 10.1115/1.4048304. Impact factor (3.0).
15. Amit Arora, Swaranjit Singh Cameotra , Chandrajit Balomajumder, Rajnish Kumar, Anil Kumar Singh, B. Santhakumari,Pushpendra Kumar,Sukumar Laik, “Rhamonolipids produced by *Pseudomonas aeruginosa* Promotes Methane Hydrates Formation in Fixed Bed Silica Gel Medium”, *Marine Geophysical Research*, 42(5): 1-11, 2021.DOI: . Impact factor (1.4).
16. Shadman H. Khan , Gaurav Dixit, C.B. Majumder, Amit Arora,“A numerical investigation into gas production under worst case scenario of limited heat transfer”, *Marine Geophysical Research*, 42(24): 1-20, 2021.DOI: https://doi.org/10.1007/s11001-021-09445-x.Impact factor (1.4).
17. Anupama Kumari , Chandrajit Balomajumder , Amit Arora , Gaurav Dixit and Sina Rezaei Gomari, “Physio-Chemical and Mineralogical Characteristics of Gas Hydrate-Bearing Sediments of the Kerala-Konkan , Krishna-Godavari and Mahanadi Basins”, *Journal of Marine Scienceand Engineering*, 9(808): 1-21,2021.DOI:https://doi.org/10.3390/jmse9080808. Impact factor (2.9).
18. Parmpreet Kaur, Varinder Singh and Amit Arora, “ Microbial Concrete – A SustainableSolution For Concrete Construction”, *Applied Biochemistry and Biotechnology*, 194: 1401-1416, 2022. DOI: . ,Impact factor (3.0)
19. Shadman H. Khan, Gaurav Dixit, C.B. Majumder, Amit Arora, “Energy Analysis and determination of controlling Mechanisms of Dissociation for Hydrate Reservoirs via

- Tracking of Dissociation Front”, Arabian Journal of Geosciences, 14(609): 1-18, 2021.DOI:<https://doi.org/10.1007/s12517-021-06944-4>. Impact factor (1.827).
20. Vaishali Goyal, Arun Kumar Asati , Rajeev Kumar Garg, Amit Arora, “A review of the parametric study of earth air heat exchanger based on physical experimentation”, Indian journal of engineering and material science, accepted on 3rd March 2022. Impact Factor (0.9).
 21. Vaishali Goyal, Arun Kumar Asati , Rajeev Kumar Garg, Amit Arora, “An Experimental Study for a investigating a novel and natural bank type heating and cooling energy saving air conditioning system”, Proceedings of the institute of mechanical engineers Part E : Journal of process mechanical Engineering, 2022,1-10. Impact Factor (2.4).
 22. Vishwajeet , Halina Pawlak Kruczek , Marcin Baranowski , Michal Czerep , Artur Chorażyczewski ,Krystian Krochmalny , Michal Ostrycharczyk , Pawel Ziolkowski , Pawel Madejski, Tadeusz Maczka ,Amit Arora , Tomasz Hardy , Lukasz Niedzwiecki , Janusz Badur and Dariusz Mikielewicz , “Entrained Flow Plasma Gasification of Sewage Sludge – Proof-of-Concept and Fate of Inorganics”, Energies, 15, (1948) : 1 – 14, 2022. DOI :<https://doi.org/10.3390/en15051948> , Impact Factor (3.2).
 23. Krystian Krochmalny , Halina Pawlak-Kruczek , Norbert Skoczylas, Mateusz K , Aleksandra Gajda, Renata Gnatowska , Monika Serafin Tkaczuk , Tomasz Czapka , Amit K. Jaiswal , Vishwajeet , Amit Arora , Tomasz Hardy , Mateusz Jackowski, Michal Ostrycharczyk and Lukasz Nied zwiecki, “Use of Hydrothermal Carbonization and Cold Atmospheric Plasma for Surface Modification of Brewer’s Spent Grain and Activated Carbon”, Energies, `15,(4396) : 1 – 11, 2022. DOI : <https://doi.org/10.3390/en15124396>. Impact Factor (3.2).
 24. Halina Pawlak Kruczek, Agnieszka Urbanowska, Lukasz Niedzwiecki, Michal Czerep, MarcinBaranowski, Christian Aragon Briceno, Malgorzata Kabsch Korbutowicz, Amit Arora,Przemyslaw Seruga , Mateusz Wnukowski , Jakub Mularski,Eddy Bramer,GerritBrem and Artur Po`zarlik, “Hydrothermal Carbonisation As Treatment for Effective Moisture Removal from Digestate—Mechanical Dewatering, Flashing-Off, and Condensates’ Processing”, Energies,2023, 16, 5102, 1- 9. <https://doi.org/10.3390/en16135102>. Impact Factor (3.2).
 25. Vaishali Goyal, Arun Kumar Asati, Amit Arora , “An Experimental and Modeling Study for a Novel Bank-Type Earth Air Heat Exchanger for the Summer Season Using Full Factorial Design”, Journal of Thermal Science and Engineering Application (American Society of Mechanical Engineer, ASME), 2023, DOI: 10.1115/1.4055968. Impact Factor (2.1).
 26. Lukasz Niedzwiecki, Krzysztof Moscicki, Anton Bijl, Pawel Owczarek, Amit Arora,MateuszWnukowski, Christian Aragon-Briceno, Vishwajeet, Halina Pawlak Kruczek, Eddy Bramer,GerritBrem and Artur Pozarlik, “Influence of Hydrothermal Carbonization on Catalytic FastPyrolysis of Agricultural Biomass”. Applied Sciences, 2023, 13, 4190, 1-16.. Impact Factor (2.7).
 27. Akanksha Thakur , Virender Shivay, Szurjit Singh Katoch, Alok Garg and Amit

Arora, Cassia fistula seeds as a natural Coagulant for turbidity reduction: Efficacy and optimization via Central Composite Design, Biomass Conversion and Biorefinery, Impact Factor: (3.5), Accepted on 9th July, 2024. <https://doi.org/10.1007/s13399-024-05929-z>.

28. Moreno, Hanif Sutyoso, B.N. Madhusudan, C.B. Majumder, Amit Arora and Angus I. Best, "Investigation of methane gas bubble dynamics and hydrate film growth during hydrate formation using 4-D time-lapse synchrotron X-ray computed tomography", *Frontiers in earth Science*, 12, 1438185 (01-11), 2024. DOI 10.3389/feart.2024.1438185. Impact Factor (2.0).
29. Monika Gandhi, Shadman Hasan Khan, Amit Arora, Chandrajit Balomjunder, Alberto Maria Gambelli, "Effect of Isotropic and Anisotropic Permeability on Gas Production Behavior of Site NGHP-01-10D in Krishna-Godavari Basin" *Energies*, 17(21), 5248, 2024. . Impact Factor (3.252).
30. Aleksandra Modzelewska , Mateusz Jackowski , Panagiotis Boutikos , Magdalena Lech Maciej Grabowski , Krystian Krochmalny , María González Martínez , Christian Aragón-Briceño , Amit Arora , Hao Luo , Luca Fiori , Qingang Xiong, Muhammad Yousaf , Anna Trusek , Halina Pawlak-Kruczek , Lukasz Niedzwiecki, " Sustainable production of biohydrogen: Feedstock, pretreatment methods, production processes, and environmental impact", *Fuel Processing Technology* 266 (2024) 108158. . Impact Factor (7.2).
31. Shadman Hasan Khan, Monika Gandhi, Beatrice Castellani, Pietro Di Profio, Michele Ciulla, Amit Arora, C.B. Majumder "Numerical Assessment of gas production potential via depressurization: Impact of Production interval and Bottom hole pressure at site NGHP-01-10D in the Krishna Godavari basin hydrate reservoir." *Natural Gas Industry B* (Accepted 16 June 2025). (SCI and Q1 Journal; Impact Factor = 4.2).
32. .Amit Arora, Birpal Singh, Parampreet Kaur, "Novel Material i.e. Magnesium Phosphate Cement (Mpc) As Repairing Material In Roads And Buildings", *Materials today Proceeding*, 17P1: 70-76, 2019.
33. Amit Arora, Birpal Singh, Parampreet Kaur, "Performance of Nano-Particles In Stabilization of Soil: A Comprehensive", *Materials Today :Proceeding* , 17P1: 124-130, 2019.
34. Jitender Paul sharma; Praveen Kumar; Kiran Sharma; Manoj Kumar; Amit Arora; Pramod Kumar Singh, "Optical and structural properties of drop-cast PVA/PEG polyblends" , *Materials Today: Proceedings*, 34(3):705-709, 2020. DOI: <https://doi.org/10.1016/j.matpr.2020.03.801>,

35. Anupama Kumari, C B. Majumder, Amit Arora, Gaurav Dixit, “Application of Statistical Learning Theory for Thermodynamic Modeling of Natural Gas Hydrates”,Petroleum,DOI:<https://doi.org/10.1016/j.petlm.2021.10.005>.Volume 7, Issue 4, 2021, Pages 502-508.

ANNEXURE-III

PATENTS

S. No.	Name of the Inventor	Title	Application No.	Published on / Applied on	Status
1.	Amit Arora , Chandrajit Balomajumder, Rajnish Kumar, Pushpendra Kumar, Asheesh Kumar, Sukumar Laik	A Method for Inhibiting Gas Hydrate Formation by a Novel Green Kinetic Inhibitor	20161100730A	Published on 8 th September 2017	Granted on 16 th April 2019
2.	Anupama Kumari, Shadman Hassan Khan, Monika Gandhi, Chandrajit Balomajumder, Amit Arora , Gaurav Dixit	Novel Equipment for The Dissociation of Gas Hydrates	202211004290	Published on 4 th February 2022.	Grant Status :30 th August 2022.
3.	Anupama Kumari, Shadman Hassan Khan, Monika Gandhi, Chandrajit Balomajumder, Amit Arora , Gaurav Dixit	A Method for dissociation of gas hydrates	202211003671	Published on 4 th February 2022.	Grant Status :26 th December 2022.
4.	Vishwajeet, Halinal Pawalk, Tomasz Hardey , Amit Arora	A Novel economic greener valuable tile product synthesized from the residue of sewage sludge after plasma gasification	POTWIERDZE NIE/880193/P. 446892	Applied on 29-11-23	

ANNEXURE-IV

BOOK CHAPTERS PUBLISHED:

1. Navneet Sood, Rajeev Kumar Garg, M.K.Jha, Amit Arora, "Treatment of Leachate by using Natural Adsorbents", Recent Advances in Bioenergy Research, Volume II, Sardar Swaran Singh National Institution of the Renewable Energy, Kapurthala , 339-346, 2013 .978-81-927097-1-0.
2. Amit Arora, Swaranjit Singh, Cameotra, Rajnish, Kumar, Chandrajit, Balomajumder, Anil Kumar Singh, Pushpendra Kumar, Sukumar Laik, "Role of Rhamnolipid a Bio-Surfactant in Methane Hydrate Formation Kinetics", Proceedings of the First International conference on Recent Advances in Bio-Energy Research (ICRABR), Springer Proceedings in Energy ,333-343, 2016.978-81-322-2771-7. DOI: 10.1007/978-81-322-2773-1_25.
3. Ranjeet Singh, Amit Arora, Gurmit Singh and Anand K. Tyagi, "Partial Replacement of Aggregates using Industrial and Agriculture Waste in Concrete Manufacturing"; Proceedings of 2nd International Conference on Recent Advances in Bio-Energy Research (ICRABR), Springer Proceedings in Energy, 131-137, 2018. DOI: https://doi.org/10.1007/978-981-10-6107-3_10.
4. Mayank, Vaibhav Chaturvedi, Tmana Mahajan, Ravi Pratap Singh, Parampreet Kaur, and Amit Arora , "Industrial Waste Management In Portugal for Environmental Development", Proceeding of the International Conference on Industrial and Manufacturing systems (CIMS-2020), Lecture Notes on Multidisciplinary Industrial Engineering , 519-534, 2022 .DOI: .
5. Anupama Kumari , Mukund Madhaw, C. B. Majumder, Amit Arora, "Artificial Neural Network: A New Tool for the Prediction of Hydrate Formation Conditions"; Applications of Nature-Inspired Computing in Renewable Energy Systems , 95 -115, 2021. DOI: 10.4018/978-1-7998-8561-0.ch006. IGI Global Publisher, Pennsylvania 17033-1240, USA .
6. Mayank, Vaibhav Chaturvedi , Tmana Mahajan, Ravi Pratap Singh, Parampreet Kaur, and Amit Arora , "", Proceeding of the International Conference on Industrial and Manufacturing systems (CIMS-2020), "Effect of Crumb Rubber Concrete by Partial Replacement of Fine Aggregates", Optimization of Industrial Systems, Wiley, ISBN: 978-1-119-75031-4 , accepted in March 2022.
7. B Tsegaye, R Abolore, A Arora, S Jaiswal, AK Jaiswal, Biohydrogen production from agro-industry waste (green hydrogen): current and future outlooks, Value-Addition in Agri-food Industry Waste Through Enzyme Technology, 329-344, Academic Press, **ISBN: 9780323899284.**

ANNEXTURE-VI

PAPER/POSTER PRESENTED IN INTERNATIONAL CONFERENCES

1. Deepankar Chattopadhyay, Rakesh Chander and Amit Arora, "Review of TLCP Polymer," International Conference on CAD, CAM, ROBOTICS and Autonomous Factories (INCARF), 11th-13th August, 2003, Indian Institute of Technology, Delhi.
2. Amit Arora, Rajeev Garg and Anand Kumar Tayagi, "Measurement of Indoor Radon Concentration in the Dwelling of Bathinda District for the Period of March-May 2010", Environmental Challenges a Global Concern, 15th-16th October, 2010, Kanya Maha Vidyalaya, Jalandhar.
3. Amit Arora, Jasbir Singh, Charanjeet Rai, Harpreet Sethi and JS Gill, "Supported Liquid Membrane for the Separation of Nd³⁺ ions" International Conference on Recycling and Reuse of Materials (ICRM-2011), 05th-7th August, 2011, Mahatma Gandhi University, Kerala.
4. Amit Arora, Rajeev Garg, Rohit Mehra and Anand Kumar Tyagi, "Measurement of Indoor Radon Concentration in the Dwellings of Bathinda District of Punjab from June – August 2010," International Conference on Recycling and Reuse of Materials (ICRM-2011), 05th-7th August, 2011, Mahatma Gandhi University, Kerala.
5. Amit Arora, Manish Gupta, Ishant Chauhan and Pargat Singh, "Methane Hydrates in Marine Sediments: Future Potential Source of Energy", International Conference on Recycling and Reuse of Materials (ICRM-2011), 05th-7th August, 2011, Mahatma Gandhi University, Kerala.
6. Amit Arora, Garima Arora and Shashi Kumar, "Polymeric Solid Waste", International Conference on Recycling and Reuse of Materials (ICRM-2011), 05th-7th August, 2011, Mahatma Gandhi University, Kerala.
7. Amit Arora, "Modeling and Simulation of CSTR (Non- Isothermal)," International Conference on Advances in Modeling Optimization and Computing (AMOC-2011), 05th-07th 2011, December, Indian Institute of Technology, Roorkee.
8. Amit Arora, "Modeling and Simulation of Batch Reactor (Non- Isothermal)", International Conference on Advances in Modeling Optimization and Computing (AMOC-2011), 05th-07th December, 2011, Indian Institute of Technology, Roorkee.
9. Amit Gupta, Amit Arora, Menakshi and Rakesh Sehgal, "Nanotech Based Drug Delivery System and Nanobiotechnology", International Conference on Frontiers in Nanoscience, Nanotechnology and their Application, 16th-18th February 2012, Punjab university, Chandigarh.

10. Amit Arora, Raj Kumar and Ashish Koundle, "Health Care Waste Management: a Thrust Public Health Problem", an International Conference on Chemistry for Sustainable Development and Innovations, Chemical Constellation Cheminar, 10th-12th, September, 2012, Dr B.R. Ambedkar National Institute of Technology, Jalandhar, India.
11. Raj Kumar, Lalit Sharma, Rajiv Garg, Subhash and Amit Arora, "Adsorption of Congo Red on Fly Ash", an International Conference on Chemistry for Sustainable Development and Innovations, Chemical Constellation Cheminar, 10th-12th September, 2012, Dr B.R. Ambedkar National Institute of Technology, Jalandhar, India.
12. Amit Arora and Shashi Kumar, "Application of Digital Storytelling in Higher Education", Role of Technology in Enhancing the Quality of Higher Education (ICRT-2012), 26th -27th October, 2012, Kanya Maha Vidyalaya, Jalandhar, Punjab, India.
13. Rajeev Kumar Garg, Amit Arora and Raj Kumar, "Role of Communication Technology in Enhancing the Accessibility of Higher Education", Role of Technology in Enhancing the Quality of Higher Education (ICRT-2012), 26th -27th, October, 2012, Kanya Maha Vidyalaya, Jalandhar, Punjab, India.
14. Amit Arora and Rejeev Garg, "Supercritical Fluid like Carbon dioxide for the Treatment of Hospital Waste", an International Conference on Biomedical Engineering and Assistive Technologies (BEATS-2012), 06th-07th December, 2012, Dr B.R. Ambedkar National Institute of Technology, Jalandhar, India.
15. Amit Arora, Sreedevi Upadhyayula and Aditi, "Isopropylation of m-Cresol with Isopropyl Alcohol over Zeolite Catalyst", International Conference on Sustainable Technologies for Environment in Process Industries & Indo-US Joint International Conference on Energy and Environment (CHEMCON) , 27th-30th December, 2012, Organized by Dr B.R. Ambedkar National Institute of Technology, Jalandhar, India.
16. Kishori lal, Shamsher Rawat and Amit Arora, "Designing of Cement Slurry for High Pressure & High Temperature Gas and Oil Wells", International Conference on Sustainable Technologies for Environment in Process Industries & Indo-US Joint International Conference on Energy and Environment (CHEMCON), 27th -30th December, 2012, Dr B.R. Ambedkar National Institute of Technology, Jalandhar, India.
17. Amit Arora, Ashish Koundle, Maneet Kaur and Sabu Thomas, "The Effect of weight % Isora on the Mechanical Properties of Biodegradable Green Composites made from Natural Rubber, Coir Fibre and Isora Fibre", Asian Polymer Association Conference, 21st- 23rd February, 2013, Punjab University Chandigarh.
18. Amit Arora, Pushpendra Kumar, Asheesh Kumar, Rajnish Kumar and Chandarjit Balmajumder, "Influence of Zeolites on Gas Hydrates Formation," International Seminar on Nanotechnology an Alternate Energy System a Global Status Pathways,

12th -13th August 2013, University of Petroleum & Energy Studies (UPES) Campus, Dehradun.

19. Amit Arora and Chandrajit Balomajumder, “Gas Hydrates as a Problem for Oil and Gas Pipelines,” Second International Conference on Innovative Trends in Applied Physical, Chemical, Mathematical, Statistical Sciences and Emerging, Energy Technology for Sustainable Development” (APCMSET-2014) Organized by Social Welfare Foundation in Association with Krishi Sanskriti, 19th-20th July, 2014, Jawaharlal Nehru University, New Delhi, India.
20. Amit Arora and Chandrajit Balomajumder, “Role of Porous Media in the Formation of Gas Hydrates”, Second International Conference on Innovative Trends in Applied Physical, Chemical, Mathematical, Statistical Sciences and Emerging, Energy Technology for Sustainable Development (APCMSET-2014) Organized by Social Welfare Foundation in Association with Krishi Sanskriti, 19th – 20th July, 2014, Jawaharlal Nehru University, New Delhi, India.
21. Amit Arora and Chandrajit Balomajumder, “Gas Hydrates as Upcoming Source of Energy”, Second International Conference on Innovative Trends in Applied Physical, Chemical, Mathematical, Statistical Sciences and Emerging, Energy Technology for Sustainable Development, (APCMSET-2014), Social Welfare Foundation in Association with Krishi Sanskriti, 19th-20th July 2014, Jawaharlal Nehru University, New Delhi, India.
22. Amit Arora and Chandrajit Balomajumder, “Role of Surfactants in the Formation of the Gas Hydrates, “Second International Conference on Innovative Trends in Applied Physical, Chemical, Mathematical, Statistical Sciences and Emerging, Energy Technology for Sustainable Development”, (APCMSET-2014) Organized by Social Welfare Foundation in Association with Krishi Sanskriti, 19th-20th July, 2014, Jawaharlal Nehru University, New Delhi, India.
23. Amit Arora, Pushpendra Kumar, Asheesh Kumar, Rajnish Kumar, Maneet Kaur and Chandrajit Balomajumder, “Influence of Zeolites on Carbon dioxide Hydrates Formation”, Proceedings of the 8th International Conference on Gas Hydrates ICGH8 28th July, 1st August, 2014, Beijing, China.
24. Amit Arora, Maneet Kaur, Ashish Koundle and Sabu Thomas, “Biodegradable Composites from Natural Rubber, Coir Pith and Isora Fibre as Various Biomaterials”, International Conference on Polymeric Biomaterials, Bioengineering & Biodiagnostics, 27th-30th October, 2014, ENEA, Italy, IIT Delhi, India.
25. Amit Arora, Pushpendra Kumar, Rajnish Kumar, Chandrajit Balomajumder, Swaranjit Singh Cameotra and Sukumar Laik, “Role of Biosurfactants in Natural Gas Hydrates Formation Kinetics”, 9th International Methane Hydrate R&D (IMHRD) Workshop CSIR, 9th-12th November, 2014, National Geophysical Research Institute, Hyderabad, India.

26. Amit Arora and Chandrajit Balomajumder ,“Gas Hydrates as Novel Resource of Energy”, International Conference on Structural and Inorganic Chemistry, 4th-5thDecember, 2014, IISER Pune, NCL Pune, and SP Pune University, India.
27. Amit Arora and Chandrajit Balomajumder ,“Gas Hydrates as a Boon to Mankind,” Theoretical Chemistry Symposium,18th-21stDecember, 2014. NCL Pune, Indian Institute of Science Education and Research, Pune, India.
28. Amit Arora, Swaranjit Singh Cameotra, Rajnish Kumar, Pushpendra Kumar , Chandrajit Balomajumder and Sukumar Laik ,“Role of Rhamnolipid a Bio-Surfactant in Methane Gas Hydrate Formation Kinetics,” 1st International Conference on Recent Advances in Bioenergy Research, 14th-17thMarch, 2015, Sardar Swaran Singh National Institute of Renewable energy, Kapurthala, Punjab, India.
29. Amit Arora, Asheesh Kumar, Rajnish Kumar Gaurav Bhattacharjee, Pushpendra Kumar and Chandrajit Balomajumder, Best Paper Award, “Carbon dioxide Hydrate Formation in Fixed Bed and Stirred Tank Reactor System”, 6th World Renewable Energy Technology Congress, 21st-23rdAugust, 2015,New Delhi, India.
30. Ranjeet Singh, Amit Arora, Gurmit Singh and Anand Kumar Tyagi, Best Poster Award, “Partial Replacement of Aggregates using Industrial and Agriculture Waste in Concrete Manufacturing”, International Conference on Recent Advances in Bioenergy Research, 25th -27th February , 2016, Sardar Swaran Singh National Institute of Renewable energy, Kapurthala, Punjab, India.
31. Gurmit Singh, Amit Arora, Ranjeet Singh and Anand Kumar Tyagi, “Utilization of Industrial and Agricultural Waste Material as Aggregates in Partial Replacement of Coarse Aggregates in the Conventional Concrete”, 2nd International Conference on Recent Advances in Bioenergy Research, 25th-27thFebruary ,2016, Sardar Swaran Singh National Institute of Renewable energy, Kapurthala, Punjab, India.
32. Amandeep Kaur, Sangeeta Sharma and Amit Arora, Poster Presentation titled “Fabrication Methodology of nanoparticles”, 2nd International Conference on Harnessing Engineering, Technology & Innovation for Sustainable Growth (HETIS 2016), 1st,October 2016, Dr. S.S. Bhatnagar University Institute of Chemical Engineering & Technology, Panjab University, Chandigarh India.
33. Vinay Saini, Amit Arora, CB Majumder, Short communication titled “Role of green sustainable tribology towards renewable energy and sustainable development: present and future prospects” 2nd Renewable Energy Sources Research and Business (RESRB) 2017 conference, 19-21June, 2017, Wrocław, Poland.
34. Amit Arora, Swaranjit Singh Cameotra, Rajnish Kumar, Chandrajit Balomajumder, Anil Kumar Singh, Pushpendra Kumar, Sukumar Laik, Oral lecture titled “Influence of silica gel and lipopeptide biosurfactant on methane hydrate Kinetics” 2nd Renewable Energy Sources - Research and Business RESRB 2017 conference, 19th-21thJune, 2017, .

35. Amit Arora, Swaranjit Singh Cameotra, Rajnish Kumar, Chandrajit Balomajumder, Anil Kumar Singh, B. Santhakumari, Pushpendra Kumar, Sukumar Laik, Oral lecture titled "Rhamnolipids accelerates methane hydrates formation in a fixed bed silica gel system" 2nd Renewable Energy Sources - Research and Business RESRB 2017 conference 19th-21th, June, 2017, Wrocław University of Science and Technology, Poland.
36. Amit Arora, "A Paper Titled Rhamnolipid produced by *Pseudomonas aeruginosa* Strain A11 accelerate Methane Hydrates formation in fixed Bed Silica Gel System", 2nd International Conference on Conscientious And Unimpeachable Technologies (ICCUT-2017), 14th October 2017, organized by Andrews Institute of Technology and Management, Gurugram and Technically sponsored by Institute of Institutional Industrial Research (IIIR).
37. Amit Arora, A Paper Titled "Removal of Dye from Waste Water Using Activated Carbon Synthesized from Industrial Waste & Agricultural Waste", 2nd International Conference on Conscientious And Unimpeachable Technologies (ICCUT-2017), 14th October 2017, organized by Andrews Institute of Technology and Management, Gurugram and Technically sponsored by Institute of Institutional Industrial Research (IIIR).
38. Amit Arora, "A Paper Titled Aspects of green sustainable tri-biology & its impact on future product", 2nd International Conference on Conscientious And Unimpeachable Technologies (ICCUT-2017), 14th October 2017, organized by Andrews Institute of Technology and Management, Gurugram and Technically sponsored by Institute of Institutional Industrial Research (IIIR).
39. Amit Arora, "A Paper Titled Activated carbon synthesized from Industrial and Agricultural Waste for the Removal of Dyes: A Review in fixed Bed Silica Gel System", 2nd International Conference on Conscientious and Unimpeachable Technologies (ICCUT-2017), 14th October 2017, organized by Andrews Institute of Technology and Management, Gurugram and Technically sponsored by Institute of Institutional Industrial Research (IIIR).
40. Amit Arora, "A Paper Titled Hydrate formation of carbon dioxide in fixed bed stirred tank reactor system: Applications to CO₂ Capture", 2nd International Conference on Conscientious and Unimpeachable Technologies (ICCUT-2017), 14th October 2017, organized by Andrews Institute of Technology and Management, Gurugram and technically sponsored by Institute of Institutional Industrial Research (IIIR).
41. Amit Arora, "A Paper Titled Combination of Silica gel and lipopeptide biosurfactant on Methane hydrate formation", 2nd International Conference on Conscientious and Unimpeachable Technologies (ICCUT-2017), 14th October 2017, Andrews Institute of Technology and Management, Gurugram and Technically sponsored by Institute of Institutional Industrial Research (IIIR).

42. Amit Arora, Oral Presentation titled, “Pseudomonas Aeruginosa Promoting Methane Hydrate Formation”, 5th Bioprocessing Conference, 9th to 11th December, 2017, IIT Guwahati, India.
43. Amit Arora, Poster Presentation Titled, “Bio-Concrete: an Eco friendly Value added Product”. 5th Bioprocessing Conference, 9th to 11th December, 2017, IIT Guwahati, India
44. Amit Arora, Birpal Singh, Parampreet Kaur, “Performance Of Nano-Particles In Stabilization Of Soil: A Comprehensive Review”, International Conference on Advanced Materials , Energy & Environmental Sustainability (ICAMEES -2018), University of Petroleum and Energy Studies (UPES), 14th – 15th December, 2018, Dehradun, India.
45. Amit Arora, Birpal Singh, Parampreet Kaur, “ Novel Material I.E. Magnesium Phosphate Cement (MPC) As Repairing Material In Roads And Buildings”, International Conference on Advanced Materials , Energy & Environmental Sustainability (ICAMEES -2018), University of Petroleum and Energy Studies (UPES), 14th–15th December- 2018, Dehradun, India.
46. Shadman H. Khan, C B Majumder, A K Misra, Amit Arora, “Novel Framework for Hydrate based Hydrogen Production and Storage using Electromagnetic Radiation”, XXIV International Symposium on Combustion Processes(ISCP) , 23th-25th September, 2019, Wrocław University of Science and Technology, Poland.
47. Shadman H Khan, Anupama Kumari, C B Majumder, A K Misra, Amit Arora, “Thermodynamic Modelling and Correlations of methane, ethane, carbon dioxide, hydrogen sulphide and nitrogen Hydrates with cage occupancies”, XXIV International Symposium on Combustion Processes (ISCP) , 23th-25th September, 2019, Wrocław University of Science and Technology, Poland.
48. Mayank, Ravi Pratap Singh, Vaibhav Chaturvedi, Parampreet kaur, shivangi, Amit Arora, “Effect of Crumb Rubber on Concrete by Partial Replacement of Fine Aggregates” , International Conference on Industrial and Manufacturing System (CIMS-2020), 09th – 11th October, 2020, Dr. B. R. Ambedkar National Institute of technology, Jalandhar, India.
49. Amit Arora, “Gas Hydrates (An Untapped White Gold: Novel Fuel of Future Generation”, International Science and Innovation Congress (ISARC), 22nd – 23rd May, 2021, Ankara, Turkey.
50. Amit Arora, “Microbes as a Source of Nanoparticles for Target Drug Delivery” Nanotechnology and Nanomedicine, 07th June, 2021, Phronesis Researchers world (USA), Nottingham Trent University, UK.
51. Parampreet kaur, Varinder Singh, Amit Arora, “A Novel, Greener and Cleaner Bacterial Composite Concrete – An Experimental Study”, 16th – 19th September 2021, Dr. B.R.

52. Mohit Segal, Aloukik Arora, Abhishek Gautam, Rajan Sharam, Amit Arora, “Role of Meditation in Environmental Laws: National and International Prospective”, 19th – 20th April 2022, International Marmara Scientific Research and Innovation Congress (ISARC), Istanbul, Turkey.
53. Mohit Segal, Aloukik Arora, Manjuree Debnath, Abhishek Gautam, Rajan Sharam, Amit Arora, “Role of Meditation in Improving the Health of Human Beings”, 28th – 29th April 2022, International Marmara Scientific Research and Innovation Congress (ISARC), Istanbul, Turkey.
54. Vishwajeet, Amit Arora , Lukasz Niedzwiecki , Anton Bijl , Mateusz Wnukowski , Halina Pawlak Kruczek , Tomasz Hardy , Gerrit Brem , Eduard A. Bramer , Pawel Owczarek , Christian Aragon Briceno , Artur Pozarlik , Krzysztof Mościck , Miao Guo , Bhavesh Wadher, “Fast pyrolysis of agricultural biomass influence of HTC pretreatment and use of CaO as catalyst”, 20th – 23th June 2022, Energy and Climate Transformations 3rd International Conference on Energy Research & Social Science, University of Manchester, United Kingdom.
55. Vishwajeet, Ethan Errington, Tomasz Hardy, Miao Guo, Amit Arora, “Ret Screen Software – A tool useful in Energy Management.” KME, XIV Conference, Youth in Energy”, Wroclaw University of Science and Technology, Poland on 14th-16th November, 2022.
56. Vishwajeet, Ethan Errington, Tomasz Hardy, Miao Guo, Amit Arora, “Scanning Electron Microscopy- Energy Dispersive X-Ray (SEM-EDX) Analysis of Sewage Sludge before and after Hydrothermal Carbonization.” KME, XV Conference, Young Scientists Power Engineering”, Wroclaw University of Science and Technology, Poland on 24th-26th April, 2023.
57. Distinguished Keynote address entitled “ Gas Hydrate as Upcoming Clean Energy Technologies “ at the International Symposium on Transforming Waste Management : Circular Economy & Energy Sustainability held on 28th–29th November 2024 at IIT Roorkee.
58. Plenary lecture entitled “Thermodynamic and Kinetics studies of Methane Hydrates as a Noble Energy Resources” in the International Conference on “Chemical Resilience & Sustainable Practices: Advance materials in Water Purification Strategies for Desalination, Energy production & Environmental conservation” INDACON 2025 jointly organized by Harcourt Butler Technical University, Kanpur & Indian Desalination Association in collaboration with Dalhousie University, Canada and National Sugar Institute, Kanpur from 20th-22nd February 2025.
59. Keynote lecture entitled “Hydrate-Based Novel Technology for the Capture of Carbon Dioxide” in the International Conference on “Greening the Future: Innovations and Challenges in Sustainable Chemical Engineering” CHEM-TECHNOVA 2025 jointly

organized by Harcourt Butler Technical University, Kanpur in collaboration with Dalhousie University, Canada and National Sugar Institute, Kanpur from 3rd-5th April 2025.

PAPER/POSTER PRESENTED IN NATIONAL CONFERENCES

1. Amit Arora and Lalit Sharma, “Membrain Separation Technology,” National Seminar on Science & Technology in Present Perspectives, 26th October 2002, SBSCET, Ferozepur, Punjab, India.
2. Amit Arora and Lalit Sharma, “Synthesis of Sugar Based Biodegradable Surfactance to Trap Organic Pollutants”, National Seminar on Science & Technology in Present Perspectives, October 26th 2002, SBSCET Ferozepur, Punjab, India.
3. Amit Arora, Rajeev Kumar Garg, Rohit Mehra and Anand Kumar Tyagi, “Measurement of Indoor Radon Concentration in the Dwellings of Bathinda District of Punjab for the period September-November 2010”, WMR-2011 National Conference on Waste Management and Recycling, 09th-10th December, 2011, SLIET Longoval, Punjab, India.
4. Davinder, Amit Arora, Sachin Kumar and Anand Kumar Tyagi, “Sources and Techniques of Handling Agro Waste”, National Conference on Recent Advances in Bioenergy Research, 07th-08th December, 2012, Sardar Swaran Singh National Institution of the Renewable Energy, Kapurthala, Punjab, India.
5. Amit Arora, Bhajan Dass, Dheeraj Sood, Sangeeta Sharma and Amit Arora, “A Study on Treatment Strategies for the Effluents of Recycled Waste Paper Mills of Malwa Region of Punjab,” Conference on Technological Advancements in Chemical and Environment Engineering TACEE-2012, 21st-24th March, 2012, BITS, Pilani, Rajasthan, India.
6. Amit Arora, Rohit Mehra, Rajeev Garg, Anand Kumar Tyagi, Diwakar Kandwal and Mithlesh Raina, “Radiation Pollution in Human Habitat,” Conference on Technological Advancements in Chemical and Environment Engineering TACEE-2012, 21st-24th March, 2012, BITS, Pilani, Rajasthan, India.
7. Amit Arora, Mandeep Singh, Supriya, Kshama, Rajwant Kaur, Chetan Sharma and Amit Arora, “Production of Green Diesel Through Transesterification of Waste Cooking Oil,” Conference on Technological Advancements in Chemical and Environment Engineering TACEE-2012, 21st-24th March, 2012, BITS, Pilani, Rajasthan, India.
8. Amit Arora, Rajeev Kumar Garg, Sangeeta Sharma, Bhavna Wasson and Sandeep Kaur, “Conversion of Biomass into Biocoal”, National Conference on Material Science

Application in energy and Environment, 02nd-03rd March,2012 DAV college Jalandhar, Punjab, India.

9. Amit Arora, Bhavna Wasson, Ashish Koundle and Mamta Arora,“Fabrication Technologies of Biodegradable Nanoparticles”, National Conference on Material Science Application in Energy and Environment, 02nd-03rd March,2012, DAV college Jalandhar, Punjab, India.
10. Mamta Arora, Amit Arora,Wasson and Bhavna, “Role of Statistics in Drug Development in 21st Century”, National Conference on Advances and Applications in Statistics 20th- 21stFebruary 2012, Punjab University, Chandigarh, Punjab, India.
11. Amit Arora, Rajeev Garg, Rohit Mehra and Anand Kumar Tyagi, “Statistical Model of Lifetime Fatality Risk due to Indoor Radon Concentration of Bathinda Distt. for period Dec 2010 to Feb 2011,”National Conference on Advances and Applications in Statistics, 20th- 21st February ,2012, Punjab University, Chandigarh, Punjab, India.
12. Amit Arora, Vivek Soi, Veerpaul Soi and Meenakshi Veer, “E-waste Treatments Recent Advancements and Innovations in Science and Engineering,”RAISE, 06th-07th January,2012, Gru Ram Das Institute of Engineering and Technology, Bathinda, Punjab, India.
13. Vaishali Goyal, Amit Arora, Meenakshi Veer and Amit Gupta, “Hazardous Wastes- Detrimental to the Environment Recent Advancements and Innovations in Science and Engineering”, (RAISE), 06th-07th January ,2012, Gru Ram Das Institute of Engineering and Technology, Bathinda, Punjab, India.
14. Amit Arora, Chandarjit Balmajumder and Rajnish Kumar, (2014) “Influence of Surfactants on Gas Hydrates Formation,”National Seminar on Recent Advances in Pollution and Abatement, Feb 14th-15th,2014,MIET, Meerut, India.
15. Amit Arora, Chandarjit Balmajumder and Swarnjit Singh Cameotra, (2015) “Effects of Biosurfactants on Gas Hydrate”, National Seminar on Sustainability of New & Renewable Energy. A Present Scenario- SUNREAPS, 17thApril, 2015, Chandigarh University Sponsored by, Ministry of New & Renewable Energy, New Delhi, India.
16. Manoj Kumar and Amit Arora, “Advances in Polymer Gel Electrolytes”National Conference on Advances in Manufacturing Systems Technology”, Materials and Management (CAMS-2015), 23rd-24th December, 2015, Shaheed Bhagat Singh State Technical Campus, Firozpur, India.
17. Amit Aroraand Gaurav, “Gas Hydrates Perspective”2nd National Conference on Frontiers in Material Research and Application (FMRA)”, 24th December, 2015, Shaheed Bhagat Singh State Technical Campus, Firozpur, India.

18. Amit Arora, Manoj Kumar and Amit Arora, "Synthesis and Characterization of PVA based Polymer Gel Electrolyte", 2nd National Conference on Frontiers in Material Research and Application (FMRA), 24th, December 2015, Shaheed Bhagat Singh State Technical Campus, Firozpur, India.
19. Amit Arora, Rajat Sehgal, Sanjeev K. Bhardwaj, Amit Arora, Akash Deep, "Evaluation of Zeolitic Imidazolate Framework-8 for Desalination of Water", 2nd National Conference on Frontiers in Material Research and Application (FMRA), 24th, December 2015, Shaheed Bhagat Singh State Technical Campus, Firozpur, India.
20. Amit Arora, "Abhishek Punj, Mohit Sehgal, Gulshan Kumar and Amit Arora (2016) "Production of Biofertilizers Namely Rhizobium and Azotobacter for Nitrogen Fixation and Bacillus, Pseudomonas and Aspergillus for Phosphorus Solubilization", National Conference on Advances in Chemical and Environment Engineering, 22nd-23rd April, 2016. Dr B.R. Ambedkar National Institute of Technology, Jalandhar, India.
21. Amit Arora, Prabhjot Kaur and Naveen, "Production of Biopesticides Namely Trichoderma Viride", Beauveria Bassiana and Verticillium Lecanii" National Conference on Advances in Chemical and Environment Engineering, 22nd -23rd April, 2016, Dr B.R. Ambedkar National Institute of Technology, Jalandhar, India.
22. Amit Arora, Ranjeet Singh, Shivani Tyagi, Garima Jain and Amit Arora, Poster Presentation titled, "Partial Replacement of Aggregates using Coconut Coir in Concrete Manufacturing" Proceedings of 3rd Inter-Disciplinary National Conference on Frontiers in Material Research and Application (FMRA), 27th-28th October, 2016, Shaheed Bhagat Singh State Technical Campus, Ferozepur, India.
23. Amit Arora, Gurmit Singh, Shivani Tyagi, Rekha Sharma and Amit Arora, Poster Presentation titled, "Utilization of Waste Tyres as Aggregates in Partial Replacement of Coarse Aggregates in the Conventional Concrete" Proceedings of 3rd Inter-Disciplinary National Conference on Frontiers in Material Research and Application (FMRA), 27th-28th October, 2016, Shaheed Bhagat Singh State Technical Campus, Ferozepur, India.
24. Amit Arora, and Navdeep Kaur, "Various Aspects of Seaweeds", Proceedings of National Conference on Energy, Economy and Environment Energy, 16th-17th December, 2016, NIT Calicut, India.
25. Amit Arora, Paper Presented Titled "Novel Approach in Concrete Manufacture: Effect of Coconut coir on Compressive Strength of Concrete", 4th National Conference on Frontiers in Material Research & Applications (FMRA-2017), 21th December 2017, Shaheed Bhagat Singh State Technical Campus, Ferozepur.
26. Amit Arora, Paper Presented Titled "Effect of Coconut coir on Compressive Strength of Concrete", 4th National Conference on Frontiers in Material Research &

Applications (FMRA-2017), 21th December 2017, Shaheed Bhagat Singh State Technical Campus, Ferozepur.

27. Amit Arora, Paper Presented Titled “Effect of Crumb Rubber on Compressive Strength of Concrete”, Conference on Advances in Manufacturing Systems Technology, Materials and Management (CAMS-2017) on December 15th-16th, 2017.
28. Amit Arora, “Presented a Poster Titled Various Aspects of Biolubricants”, A Review in a one-day AICTE sponsored National Seminar on CLEAN ENERGY TECHNOLOGIES 7th November 2017, Department of Chemical Engineering, Shaheed Bhagat Singh State Technical Campus, Ferozepur. .
29. Amit Arora, Presented a Poster Titled “Advance Concrete using Microbes”, a one-day AICTE sponsored National Seminar on CLEAN ENERGY TECHNOLOGIES, 7th November 2017, Department of Chemical Engineering, Shaheed Bhagat Singh State Technical Campus, Ferozepur.
30. Amit Arora, Presented a Poster Titled “Influence of steel fibres on the compressive strength of concrete”, a one-day AICTE sponsored National Seminar on CLEAN ENERGY TECHNOLOGIES, 7th November 2017, Department of Chemical Engineering, Shaheed Bhagat Singh State Technical Campus, Ferozepur.
31. Amit Arora, Presented a Poster Titled “Comparative Study of concrete by using fumes with traditional concrete”, a one-day AICTE sponsored National Seminar on clean energy technologies, 7th November 2017, Department of Chemical Engineering, Shaheed Bhagat Singh State Technical Campus, Ferozepur.
32. Amit Arora, Presented Paper titled “New generation microbial composite concrete” , Use of rice husk and fly ash in the field of construction at National Seminar on the topic Status of qualitative research in India, 22nd -23rd November, 2019, Guru Kashi University Talwandi Sabo, Bathinda.
33. Amit Arora Paper Presented Title “Influence of Crumb Rubber on Various Properties of Concrete”, 2nd National Conference on Advances in Chemical and Environment Engineering, 23rd-24th March, 2019, Department of Chemical Engineering, Dr B.R. Ambedkar National Institute of Technology, Jalandhar, India.
34. Amit Arora Paper Presented Title “Various Aspects of Biolubricants Chairmanship of Technical Session”, 2nd National Conference on Advances in Chemical and Environment Engineering, 23th-24th March, 2019, Department of Chemical Engineering Dr B.R. Ambedkar National Institute of Technology, Jalandhar, India.

ANNEXURE-VI

PAPER/POSTER PRESENTED IN STATE CONFERENCES

1. Amit Arora, Bhavna Wasson and Rakesh Sehgal, (2012) "Microorganism and Biodegradable Polymers as a Source of Nano Particles for Target Drug Delivery", 15th Punjab Science Congress, Science in the 21st century, Feb 07th-09th,2012, GNDU, Amritsar, Punjab, India.
2. Amit Arora and Ashish Koundle, (2012) "Exploitation of Methane Clathrates as Future Energy Resource," 15th Punjab Science Congress, Science in the 21st century, Guru Nanak Dev University, Feb 07th-09th,2012, Amritsar, Punjab, India.

ANNEXURE-VII

Chairing Session/ Plenary and Invited Talks in Conferences/ Institutes

1. Co-Chairmanship of Session Environmental Science & Engineering, (2014) at International Conference on Chemical Engineering- Emerging Dimensions And Challenges Ahead & Indo Japanese Symposium on Separation Technology For Green Environment, (CHEMCON), Dec 27th-30th,2014, Chandigarh Regional Centre Indian Institute of Chemical Engineers in collaboration with Dr. SS Bhatnagar University Institute of Chemical Engineering & Technology Panjab University, Chandigarh, India.
2. Chairmanship of Session Chemical Thermodynamic, (2014) at International Conference on Chemical Engineering- Emerging Dimensions And Challenges Ahead & Indo Japanese Symposium on Separation Technology For Green Environment, (CHEMCON), Dec 27th-30th,2014, Chandigarh Regional Centre Indian Institute of Chemical Engineers in collaboration with Dr. SS Bhatnagar University Institute of Chemical Engineering & Technology Panjab University, Chandigarh, India.
3. Chairmanship of Session Energy Engineering, (2014) at International Conference on Chemical Engineering- Emerging Dimensions and Challenges Ahead & Indo Japanese Symposium on Separation Technology for Green Environment, (CHEMCON) Dec 27th-30th,2014, Chandigarh Regional Centre Indian Institute of Chemical Engineers in Collaboration with Dr. SS Bhatnagar University Institute of Chemical Engineering & Technology Panjab University, Chandigarh, India.
4. Chairmanship of Technical Session, (2016) at National Conference on Advances in Chemical and Environment Engineering, April 22nd-23rd, 2016, Dr B.R. Ambedkar National Institute of Technology, Jalandhar, India.
5. Chairmanship of Session on Advanced Nutaceuticals, Functional Food and Dietary Supplements, (2016) at International Conference, organized by Sevas Educational

- Society, July 14th-16th,2016, Andhra Pradesh, India at Apeejay Institute of Management and Technical Campus, Jalandhar, Punjab, India.
6. Chairmanship of Session, on Algal Technologies, (2016) at International Conference on Algal Technologies, July 14th-16th,2016, organized by Sevas Educational Society, Andhra Pradesh, India at Apeejay Institute of Management and Technical Campus, Jalandhar, Punjab, India.
 7. Chaired at the Renewable Energy Sources – Research and Business RESRB 2017 conference held on June 19th -21st, 2017, Wrocław, Poland session: Key note lecture 7 - RESRB2017.0010 – Torrefaction of the sewage sludge using additive: calcium oxide and lignite.
 8. Chaired at the Renewable Energy Sources – Research and Business RESRB 2017 conference held on June 19th-21st, 2017, Wrocław, Poland session: Key note lecture 5 - RESRB2017.008 – Liquid phase pyrolysis of wheat straw.
 9. Chaired a Session on ICT & E-Education in 2nd International Conference on Conscientious And Unimpeachable Technologies (ICCUT-2017) organized by Andrews Institute of Technology and Management, Gurugram and Technically sponsored by Institute of Institutional Industrial Research (IIIR) on 14th October 2017.
 10. Resource person at National Seminar on the topic “Status of qualitative research in India: An Overview, 22nd-23rd November, 2019 held at Guru Kashi University Talwandi Sabo, Bathinda.
 11. Chairmanship of Technical Session, (2019) at 2nd National Conference on Advances in Chemical and Environment Engineering, March 23nd-24rd, 2019, Department of Chemical Engineering Dr B.R. Ambedkar National Institute of Technology, Jalandhar, India.
 12. Chairing Session “Alternative fuels and power technologies”, (YPE) at XII Conference, Young Specialists in Power Engineering on 9th – 11th December 2020 at Wrocław University of Science and Technology.
 13. Chairing Session at International Chemical Engineering Conference 2021 (100 Glorious Years of Chemical Engineering & Technology)”, organised By Department of Chemical Engineering on 16th –19th September 2021 at Dr B R Ambedkar National Institute of Technology at Jalandhar.
 14. Chairing Session at “International Conference on Advances in Civil, Chemical and Mechanical Engineering”(ICACCME-2022), organized on 6th May 2022 at DAV University, Jalandhar.
 15. Chaired a Session at International Conference on “Recent Trends in Transport Phenomena (RTTP- 2024)” at NIT Hamirpur on 25th June 2024.

16. Chaired a Session at International Conference CHEMCON-2024 on “ Role of Chemical Engineering Towards Sustainable Development and Atamnirbhar Bharat” organized by Indian Institute of Chemical Engineers at Dr. B.R.Ambedkar National Institute of Technology Jalandhar on 29-12-2024.
17. Session Chair in CHEMCON-2024, held at Dr. B.R. Ambedkar, NIT Jalandhar for 77th Annual session of IICHE, an International Conference on Role of Chemical Engineering towards Sustainable Development and Atmanirbhar Bharat from 27th-30th December 2024.
18. Session Chair in INDACON 2025, “International Conference on Chemical Resilience & Sustainable Practices: Advance materials in Water Purification Strategies for Desalination, Energy production & Environmental conservation” jointly organized by Harcourt Butler Technical University, Kanpur & Indian Desalination Association in collaboration with Dalhousie University, Canada and National Sugar Institute, Kanpur from 20th-22nd February 2025.
19. Session Chair in CHEM-TECNOVA 2025, International Conference on “Greening the Future: Innovations and Challenges in Sustainable Chemical Engineering” jointly organized by Harcourt Butler Technical University, Kanpur in collaboration with Dalhousie University, Canada and National Sugar Institute, Kanpur from 3rd-5th April 2025.

INVITED TALKS/EXPERTS TALKS (TECHNICAL)

1. Invited talk titled, “Supported Liquid Membrane for the Separation of Nd³⁺ ions,” Expert Lecture delivered during International Conference on Recycling and Reuse of Materials ICRM-2011, Aug 05th-07th, 2011, Mahatma Gandhi University, Kerala.
2. Invited talk titled, “Various Aspects of Sea Weeds in the International Conference on Algal Technologies”, organized by Sevas Educational Society, Andhra Pradesh, India, July 14th-16th, 2016, at Apeejay Institute of Management and Technical Campus, Jalandhar, Punjab.
3. Invited talk titled, “Current Techniques to Exploit Gas Hydrates in Industry Institute Interaction Programme” Organized by Department of Chemical Engineering in Association with Indian Institute of Chemical Engineers, March 6th, 2016, Doaba Regional Centre at Dr. B.R.Ambedkar NIT Jalandhar, Punjab.
4. Invited talk titled, “Delivered Expert Talk on Future Generation Fuels in 2nd International Conference on Conscientious and Unimpeachable Technologies”(ICCUT-2017) organized by Andrews Institute of Technology and Management, Gurugram and technically sponsored by Institute of Institutional Industrial Research (IIIR) on 14th October 2017.
5. Invited talk titled, “Future Prospectives of Gas Hydrates” March 20th 2017, at Atal Bihari Vajpayee Govt. Institute of Engineering & Technology Pragtinagar, Shimla.

6. Invited talk titled, “Natural Gas Hydrates” For National conference on Latest Innovations in Applied Science, March 18th 2017, at Aryan Group of colleges, Rajpura.
7. Invited talk titled, “Domestic radiation as source of indoor radon” in National Seminar on Recent Trends in Plant and Environmental Sciences, February 10th, 2017 at Guru Nanak Dev University, Amritsar.
8. Invited talk titled, “Inhibition of Gas hydrates by novel green inhibitor, International Conference on Advanced Materials”, Energy & Environmental Sustainability (ICAMEES -2018) , University of Petroleum and Energy Studies (UPES), Dehradun, India-14th – 15th December- 2018.
9. Invited talk titled, “Comparison of new Generation microbial concrete with composite concrete synthesized from Industrial and Agriculture Waste on 17th, April, 2018”, at Atal Bihari Vajpayee Govt. Institute of Engineering & Technology Pragtinagar, Shimla.
10. Invited talk titled, “Gas Hydrates a Future Generation Fuel”, at Multi-Track National Conference, ‘SLIETCON-2019 under track II organized by Sant Longowal Institute of Engineering & Technology on March 12th, 2019 at Chandigarh.
11. Invited talk titled, “Expert Lecture titled Gas hydrates- fuels of the future at online FDP on Alternate Fuels held at SBSSTC sponsored by AICTE Training and Learning (ATAL) Academy , AICTE New Delhi” organized by Shaheed Bhagat Singh State Technical Campus, Ferozepur on 7th September 2020.
12. Plenary talk titled, “Gas hydrates – an untapped resource of energy” at KME XII Conference Young Scientists in Power Engineering (YPE) on 9th- 11th of December 2020 at Wroclaw University of Science and Technology, Poland.
13. Invited talk titled, “Renewable Energy Resource (Biomass and Geothermal)”, at Himachal Pradesh Technical University, Hamirpur on 26th December 2020.
14. Invited talk titled, “Renewable Energy Resource (Wind and Hydropower)”, at Himachal Pradesh Technical University, Hamirpur on 12th January 2021.
15. Invited talk titled, “Unexploited Nanomaterials for Greener Energy” at one week STC on Nano materials and their greener applications at NITTTR Chandigarh ICT course-172 with nodal centre at SBSSU, Ferozepur on 31st March 2022.
16. Invited talk titled, “ Gas hydrates as greenenergy materials ” at one week STC on one week STC Green materials and technology by NITTTR Chandigarh ICT course-12 with nodal centre at SBSSU, Ferozepur on 1st May 2023.
17. Expert lecture titled “Gas hydrate as upcoming cleaner technology” at e-STC on “ Advanced Environmental and Energy Trends AEET-2023” at NIT Hamirpur on 20-11-2023.

18. Expert lecture titled “Gas hydrate and applications” at Refresher course in Nanoscience and Instrumentation at NITTR Chandigarh on 19-09-23.
19. Expert lecture titled “Urban and Rural housing : A comparison wrt radioactive radiation and possible solutions” in Short term course on “Technologies for Sustainable Rural Development at NITTR Chandigarh on 09-05-2024.
20. Keynote Speaker talk titled “Gas hydrate as an upcoming cleaner and greener fuels for future generation” at International conference on “ Sustainable Chemical Technologies : Challenges and Opportunities” at HBTU Kanpur on 22-03-24.
21. Keynote address titled “Future Generation Novel Energy Resources” at International conference entitled ‘Sustainable Approach in Desalination, Water, Energy, Environment, and Advanced Materials for Water Purification (INDACON 2024) at MIT, Muzaffarpur 25-02-2024.
22. Expert lecture titled “Gas Hydrates as upcoming futuristic fuels” at e-STC on Chemistry for Energy, Environment and Biomedical Applications at NIT Hamirpur on 20-12-2024.
23. Expert talk titled “Novel Future Generation Energy Resources” at Recent Trends in Energy and Environmental Engineering Applications (RTEEA-2024)” at NIT Hamirpur on 20.8.2024.
24. Keynote address titled “Gas Hydrates as Upcoming Clean Energy Technologies” at International Symposium on Transforming Waste Management: Circular Economy & Energy Sustainability ISTWM 2024 at IIT Rorkee on 29-11-24.
25. Expert talk entitled “Novel Future Generation Energy Resources” in e-STC on Recent Trends in Energy and Environmental Engineering Applications (RTEEA-2024) on 20th August 2024 at NIT Hamirpur.
26. Expert talk in e-STC entitled “Gas hydrates as upcoming futuristic fuels” in e-STC on Chemistry for Energy, Environment and Biomedical Applications on 20th December 2024 at NIT Hamirpur.
27. Expert talk entitled “Techniques for Handling Municipal Solid Waste” at SBS State University Ferozepur on 31st January 2025.
28. Expert talk entitled “Novel Nanomaterials for Future Generations in the field of Energy” in e-stc on Advances in Nanomaterials for Energy and Environmental Applications (ANEAA-2025) at NIT Hamirpur on 3rd March 2025.
29. Expert talk on title “Gas hydrates as Futuristic novel resource of energy at State agricultural management and extension training institute at mashobra , Shimla on 16-07-2025

INVITED TALKS/EXPERTS TALKS (SOCIAL)

1. Delivered an expert lecture on the topic Social harmony and integration on 20/10/2019 in 15 days induction training of Nehru Yuva volunteers from 11th-25th Oct 2019.
2. Delivered an expert lecture on the topic program monitoring on 22/10/2019 in 15 days induction training of Nehru Yuva volunteers from 11th-25th Oct 2019.
3. Delivered an expert lecture on the topic Disaster management on 20/10/2019 in 15 days induction training of Nehru Yuva volunteers from 11th-25th Oct 2019.

INTERNATIONAL COLLABORATION FOR RESEARCH WORK

1. Imperial College London, United Kingdom.
2. School of Chemical and Process Engineering, University of Leeds, United Kingdom
3. University of Twente Mechanical Engineering, Enschede, The Netherlands.
4. Biological and Chemical Engineering, Aarhus University, Denmark.
5. University of Liverpool, United Kingdom.
6. Department of Chemical Engineering, School of Science Engineering and Design, Teesside University, Middlesbrough TS1 3BX, UK.
7. Department of Chemical and Biochemical Engineering, Technical University of Denmark, DK-2800 Kongens Lyngby, Denmark.
8. Centre for Long Subsea Tiebacks, Department of Chemical Engineering, The University of Western Australia, 35 Stirling Hwy, Crawley WA 6009, Australia.
9. Department of Mechanics, Machines, Devices and Energy Processes, Faculty of Mechanical and Power Engineering, Wrocław University of Science and Technology, Wybrzeże Wyspiańskiego 27, 50-373 Wrocław, Poland.
10. The Strata Mechanics Research Institute of the Polish Academy of Sciences, 30-059 Kraków, Poland.
11. Faculty of Mechanical Engineering and Computer Science, Institute of Thermal Machinery, Częstochowa University of Technology, Armii Krajowej 21, 42-200 Częstochowa, Poland.
12. Department of Micro, Nano and Bioprocess Engineering; Faculty of Chemistry, Wrocław University of Science and Technology, Norwida 4/6, 50-373 Wrocław, Poland.
13. School of Food Science and Environmental Health, Faculty of Science, Technological University Dublin-City Campus, Central Quad, Grangegorman, D07 ADY7 Dublin, Ireland.
14. Wrocław University of Environmental and Life Sciences, Faculty of Life Sciences and Technology, Institute of Agricultural Engineering, Ul. Chelmonskiego 37, 51-630 Wrocław, Poland.
15. School of Electric Power, South China University of Technology, Guangzhou 510641, China.
16. Department of Bioprocess Engineering, Wrocław University of Economics, Komandorska 118/120, 53-345 Wrocław, Poland.
17. Department of Automation, Mechatronics and Control Systems, Wrocław University of Science and Technology, Wybrzeże Wyspiańskiego 27, 50-370 Wrocław, Poland.
18. Department of Energy Conversion Engineering, Faculty of Mechanical and Power Engineering, Wrocław University of Science and Technology, 50-370 Wrocław, Poland.
19. Department of Automatic Control, Faculty of Electronics, Mechatronics and Control Systems, Wrocław University of Science and Technology, 50-370 Wrocław, Poland.
20. Department of Power Systems and Environmental Protection Facilities, Faculty of Mechanical Engineering and Robotics, AGH University of Science and Technology, 30-059 Krakow, Poland.
21. Institute of Power Systems Automation, 51-618 Wrocław, Poland.

22. Energy Conversion Department, Institute of Fluid Flow Machinery, Polish Academy of Sciences, 80-231 Gdansk, Poland.
23. Wrocław University of Science and Technology, Faculty of Mechanical and Power Engineering, Department of Boilers, Combustion and Energy Processes, Wybrzeże Wyspiańskiego, Wrocław, Poland.
24. VŠB—Energy Research Center, Technical University of Ostrava, 708 00 Ostrava, Czech Republic.
25. CIRAF , Department of Perugia , Via G.Duranti 67 , 06125, Perugia , Italy
26. Department of Pharmacy , University “G. d’Annunzio” of Chieti-Pescara , Via Dei Vestini , cheiti , Italy.

ANNEXURE-IX

RESEARCH GUIDANCE(Ph.D.)

S.no.	Name of Research Scholars (Enrolment No.)	Ph.D.	Area of Research / Work	Status	Supervisors
1.	Mrs.Parampreet Kaur (A161841002)	Department of Civil Engineering, Guru Kashi University, Talwandi Sabo, Bathinda, Punjab, India (151302)	Comparative Analysis of New Generation Microbial Concrete with Composite Concrete Synthesized from Industrial Wastes and Agricultural Wastes	Ph.D. Degree awarded in 2020	Dr. Amit Arora, Dr.Varinder Singh
2.	Vaishali Goyal (1806003)	Department of Mechanical Engineering, Shaheed Bhagat Singh State Technical Campus, Ferozepur – 152004, I.K. Gujral Punjab Technical University, Kapurthala, Jalandhar – 144603.	Experimental study of Bank type earth air heat exchanger for both summer and winter seasons.	Ph.D. Degree awarded in 2023.	Dr. Amit Arora Dr. Arun Kumar Asati Dr. Rajeev Kumar Garg
3.	Mr. Shadman Hasan Khan (Enrollment No. 18908007)	Department of Chemical Engineering, Indian Institute of Technology Roorkee, Uttarakhand , India (247664)	Studies on methane gas hydrate.	Ph.D. Degree awarded in 2023.	Dr.Amit Arora, Dr. (Prof) C B Majumder
4.	Mr. Lukasz Niedzwiecki (Enrollment No.6429)	Department of Boilers, Combustion and Energy Processes, Wroclaw University of Science and Technology,50-370 Wroclaw Poland	Influence of the Torrefaction of Biomass on the Process of Gasification	Awarded in 2023	Dr. Amit Arora, Dr. (Prof) Halina
5.	Mr. Chandra kanta Bhusal	Medical Parasitology Group Post Graduate Institute of Medical Education and	A Computational approach using bioinformatics for screening of drug	Awarded in 2023	Dr. Amit Arora, Dr. Rakesh Sehgal, Dr. Upninder Kaur

		Research (PGIMER) Chandigarh, India (160012)	targets and drug repurposing via in- silicon and in- vitro method for Leishmania species		
6.	Mr. Mohit Sharma (Enrollment No. 10CC20A33001)	Academy for Scientific and Innovative Research (ACSIR), Chemical Technology Division CSIR-HIBT Palampur, Himachal Pradesh, India (176061)	Exploration of some Himalayan plants for biodegradable polymer based products	Going on Since August 2020	Dr. Amit Arora Dr. Upendra Sharma
7.	Mr. Vishwajeet	Wroclaw University of Science and Technology, Faculty of Mechanical and Power Engineering, Discipline of Environmental Engineering, Mining and energy, 50-370 Wroclaw Poland	Thermal and Thermochemical Valorisation of Low-Quality Waste Biomass-Behaviour of Inorganics	PhD Awrdded 2024	Dr. Amit Arora Tomasz Hardy
8.	Ms. Monika Gandhi(Enrolme nt No.20908016)	Department of Chemical Engineering, Indian Institute of Technology Roorkee, Uttarakhand , India (247664)	Therrmo Chemical dissociation of gas hydrates	PhD Awrdded 2025.	Dr. Amit Arora Dr. (Prof) C B Majumder
9.	Mr. Ashish Gupta (Enrolment No 210818)	Mechanical Engineering, Shaheed Bhagat Singh State University, Ferozepur.	Evaluation Of Reinforced Baghdadite, Aluminium And Hydroxy Apatite Cold Spray Coating On Titanium Alloy.	Going on Since October 2021.	Dr. Amit Arora Dr. T.S.Sidhu
10.	Mr. Munish Kumar (Enrolment No 1230306)	Mechanical Engineering, Shaheed Bhagat Singh State University, Ferozepur.	Composite Materials	Going on Since March 2023	Dr. Amit Arora Dr. Sukhjinder Singh
11.	Ms. Neha Thakur	Chemical Engineering Department National Institute of Tchnology Hamirpur		Going on Since 2025	Dr Amit Arora

ANNUXURE-X

M.Tech/M.Sc. THESIS GUIDED

Sl. No.	Title of Dissertation/Project	Department/ Institute	Name of Student (Roll No.)	Status	Supervisors
1	Biogas Production from Water Hyacinth	Department of Applied Sciences/ I.K. Gujral Punjab Technical University, Jalandhar, 144603	Davinder Singh (100667182688)	Awarded on 14 th February 2014.	Dr. Amit Arora Dr. A.K. Tyagi Dr. Sachin Kumar
2	Removal of Congo Red from aqueous solution by synthesizing paper mill sludge	Department of Applied Chemistry/MRS Punjab Technical University, Bathinda – 151001.	Gurvinder Kamboj, (15220013)	Awarded on 15 th July 2015.	Dr. Amit Arora Dr. Seema Sharma
3	Removal of methyl orange from aqueous solution by synthesizing activated carbon from paper mill sludge	Department of Applied Chemistry/ MRS Punjab Technical University, Bathinda – 151001.	Maninderjit Singh (15220028)	Awarded on 15 th July 2015.	Dr. Amit Arora Dr. Seema Sharma
4	Partial Replacement of Aggregates using Industrial and Agricultural in Concrete Manufacturing	Department of Applied Sciences/ I.K. Gujral Punjab Technical University, Jalandhar – 144603	Ranjeet Singh (100667182690)	Awarded on 2 nd June 2016.	Dr. Amit Arora Dr. A.K. Tyagi
5	Utilization of Industrial and Agricultural Waste Material as Aggregate in Partial Replacement of Coarse Aggregates in	Department of Applied Sciences/ I.K. Gujral Punjab Technical University, Jalandhar – 144603.	Gurmit Singh (100667182689)	Awarded on 2 nd June 2016.	Dr. Amit Arora Dr. A.K. Tyagi

	the Conventional Concrete				
6	Research process of Pelletizing of the low quality torrefied biomass	Department of Boilers, Combustion and Energy Processes/ Worclaw University of Science and Technology, Worclaw Poland-50-370.	Tanuj Kumar Sharma (239864)	Awarded on 17 th September 2018.	Dr. Amit Arora Dr. Krzysztof Moscicki
7	Complete Utilization of Rice Husk Ash	Department of Chemical Engineering/ I.K. Gujral Punjab Technical University, Jalandhar-144603.	Pooja Nargotra (1269773)	Awarded on 17 th July 2018.	Dr. Amit Arora Dr. Rajiv Arora
8	Combustion of the Torrefied biomass in a small scale boiler	Department of Boilers, Combustion and Energy Processes/ Worclaw University of Science and Technology, Worclaw, Poland – 50-370.	Shalvin Sharma (239866)	Awarded on 17 th September 2018.	Dr. Amit Arora Dr. Krzysztof Moscicki
9	Gasification of torrefied and raw waste biomass comparative analysis	Department of Boilers, Combustion and Energy Processes/ Worclaw University of Science and Technology, Worclaw, Poland – 50-370.	Anshul Sharma (239863)	Awarded on 17 th September 2018.	Dr. Amit Arora Dr. (Prof) Halina Pawlak Kruczek
10	Pyrolysis of raw biomass and torrefied biomass	Department of Boilers, Combustion and Energy Processes/ Worclaw University of Science and Technology, Worclaw, Poland – 50-370.	Mayank Tiwari (239865)	Awarded on 17 th September 2018.	Dr. Amit Arora Dr. (Prof) Halina Pawlak Kruczek
11	Hydrothermal treatment of waste fuels as an effective valorization method	Department of Boilers, Combustion and Energy Processes/	Vivek (245611)	Awarded on 8 th August 2019.	Dr. Amit Arora Dr. Marcin Baranowski

	for further thermal processes	Worlaw University of Science and Technology, Worlaw, Poland-50-370			
12	Thermal technologies of Biomass and Sewage Sludge utilization	Department of Boilers, Combustion and Energy Processes/ Worlaw University of Science and Technology, Worlaw, Poland – 50-370.	Navaneethan Subramaniam (245966)	Awarded on 8 th August 2019.	Dr. Amit Arora Dr. Monika Tkaczuk-serafin
13	Study Of Removal Of Heavy Metal Ions From Aqueous Solution By Adsorption On Biomaterial	Department of Chemical Engineering/ MRS Punjab Technical University, Bhatinda – 151001.	Kiranjeet Kaur (152000286)	Awarded on 18 th January 2020	Dr. Amit Arora Dr. Gulshan Chawla
14	Malachite green adsorption on activated carbon synthesized from neolamarckia cadamba	Department of Chemical Engineering/ MRSPTU Gujral Punjab Technical University, Jalandhar – 144603.	Preeti Prabha (152000286)S	Awarded on 4 th September 2021.	Dr. Amit Arora Dr. Rajeev Arora

ANNEXURE-XI

CONFERENCE/ STC /WORKSHOP ORGANIZED

1. Certificate of Appreciation as Co-coordinator for AICTE Sponsored National Seminar on “Clean Energy Technologies” organized by Department of Chemical Engineering, Shaheed Bhagat Singh State Technical Campus, Ferozepur on 7th November 2017.
2. Certificate of Appreciation as Co-coordinator for 4th National Conference on Frontiers in Material Research & Applications (FMRA2017) organized by Shaheed Bhagat Singh State Technical Campus, Ferozepur on 21st December 2017.
3. Coordinator Mathematical Methods and Computations in Engineering(MMCE 2019) 1st July 2019- 6th July 2019, Shaheed Bhagat Singh State Technical Campus, Ferozepur,AICTE, New Delhi.
4. Coordinator for 15 days Induction Training of NYVs at SBSSTC, Ferozepur from 9th-23rd October2019.
5. Coordinator for Workshop on Energy Conservation on 18th December 2019 by D2O, Bureau of Energy Efficiency (Ministry of Power, GOI). Punjab Energy Development Agency (PEDA) Jointly with SBSSTC, Ferozepur.
6. Co-Coordinator for STC “Unexploited Nanomaterials for Greener Energy” at one week STC on Nano materials and their greener applications at NITTTR Chandigarh ICT course-172 with nodal centre at SBSSU, Ferozepur on 28th March 2022 to 1st April 2022.
7. Coordinator for STCGreen Energy Material and Technology “one week STC conducted by NITTTR Chandigarh ICT course-12 with nodal centre at SBSSU, Ferozepur from 1-05-23 to 5-5-23.
8. Co-Chairman International Conference on “Recent Trends in Transport Phenomena (RTTP- 2024)” at NIT Hamirpur Sponsored by SERB-DST and Industry-COMSOL from 24-06-to 26-06-2024.
- 9.Coordinator of National e-STC on “ Advanced Environmental and Energy Trends AEET-2023 at NIT Hamirpur sponsored by institute from 20-11-2023 to 24-11-2023
10. e-STC on Advances in Nanomaterials for Energy and Environmental Applications (ANEEA-2025) from 3rd-7th March 2025.

ANNEXURE-XII

WORKSHOP/ FDP/ COURSES ATTENDED

S.No	Name of the Course	Sponsored By	Name of the organizing Institute	Department	Time Period	Duration
1.	Total Quality Management and ISO 9000 Quality Systems	AICTE	SBSCET, Ferozepur	Department of Mechanical Engineering	1 st -12 th July 2002	2 week
2.	Induction Programme for Faculty of Engineering Colleges	MHRD	TTTI, Chandigarh	Education and Educational Department	15 th -26 th July 2002	2 weeks
3.	Auto CAD	MHRD	SBSCET Ferozepur	Mechanical Engineering	18 th -22 nd April 2005	1 week
4.	Strategic Management for Excellence	MHRD/AICTE	NITTTR Chandigarh	CEC Department	20 th -24 th July 2009	1 week
5.	Biotechnology and Biochemical Engineering	MHRD	NITTTR Chandigarh	Applied Science Department	20 th -24 th June 2011	1 week
6.	Intelligent Computational Techniques	AICTE	SBSSTC, Ferozepur	Department of Electronics and Engineering	4 th -15 th July 2011	2 weeks
7.	Modern Sophisticated Analytical Techniques and their Application in Pharmaceuticals	AICTE	ISF College of Pharmacy, Moga	ISF College of Pharmacy, Moga	16 th -30 th July 2011	2 weeks
8.	Multi-Criteria Optimization Tools in Research	AICTE	SBSSTC, Ferozepur	Department of Mechanical Engg.	21 st May -1 st June 2012	2 weeks
9.	Business and Soft Skill Development in Institutions	MHRD	NITTTR Chandigarh	Media Centre Department	4 th -8 th June 2012	1 week
10.	Applied Soft Computing	TEQIP	SBSCTC Ferozepur	Department of Electronics	26 th -30 th November 2012	1 week
11.	Research Methodologies	TEQIP	SBSSTC Ferozepur	Department of	3 rd -7 th December	1 week

				Mechanical Engineering	2012	
12.	Engineering Materials	TEQIP	SBSSTC Ferozepur	Department of Applied Science & Humanities	17 th -21 st December 2012	1 week
13.	Analytical Techniques for Detection of Environmental Pollutants	TEQIP-II	SBSSTC Ferozepur	Department of Applied Science & Humanities	16 th -27 th December 2013	2 weeks
14.	Recent Advances in Energy Technology	TEQIP-II	Dr. B R Ambedkar National Institute of Technology, Jalandhar	Department of Chemical Engineering	2 nd -6 th June 2014	1 week
15.	Shale Gas & Oil	Ministry of Petroleum & Natural Gas, Govt. of India	Directorate General of Hydrocarbons (DGH)	Directorate General of Hydrocarbons (DGH)	28 th -29 th January 2016	2 days
16.	Instructional Material Development using Latest Media Through ICT	MHRD, Government of India	NITTTR Chandigarh	Media Centre Department	17 th -21 st July 2017	1 week
17.	Energy Environment and Sustainable Development	MHRD, Government of India	NITTTR Chandigarh Jointly with SBSSTC, Ferozepur (ICT, Based	Electrical Engineering	24 th -28 st July 2017	1 week
18.	Energy Conservation Building Code (ECBC) Simulation	Punjab Energy Development	Punjab Energy Development Agency in Association with Design2Occupancy Services LLP	SBSSTC, Ferozepur	11 th -12 th September 2018	2 Days
19.	Energy Efficient Building Materials	Saakaar Foundation, Chandigarh And VK:e Enviromental, Pune.	SBSSTC, Ferozepur	School of Architecture, SBSSTC, Ferozepur	17 th January 2019	1 Day
20.	ICT based Class Room communication	MHRD	SBSSTC, Ferozepur with NITTTR, Chandigarh	Educational Management	27 th May 2019 to 31 st May 2019	1 Week

21.	Mathematical Methods and Computations in Engineering (MMCE-2019)	AICTE, New Delhi	SBSSTC, Ferozepur	Department of Chemical Engineering	1 st -6 th July 2019	1 Week
22.	Big Data Analytics using Machine Learning Techniques	AICTE, New Delhi	SBSSTC, Ferozepur	Department of Computer Science Engineering	9 th -20 th December 2019	2 Weeks
23.	Workshop on Energy Conservation	Bureau of Energy Efficiency (Ministry of Power, GOI).	Punjab Energy Development Agency (PEDA) Jointly with SBSSTC, Ferozepur	Department of Chemical Engineering	18 th December 2019	1 Day
24.	Infection Prevention and Control	Government of India	SBSSTC Fzr	Personnel and Training	18 th – 23 rd April 2020	1 week
25.	Basics of COVID-19	Government of India	SBSSTC Fzr	Personnel and Training	23 rd – 27 th April 2020.	1 week
26.	Alternate Fuels	AICTE Training and Learning (ATAL) Academy , AICTE New Delhi	SBSSTC, Ferozepur	Department of Chemical Engineering	7 th – 11 th September 2020.	1 week
27.	Energy & Environmental Pollution	AICTE	BCET Gurdaspur	Department of Chemical Engineering	1 st – 6 th March 2021.	1 week
28.	Transformation Through NAAC Accreditation Process, A National Level Workshop for Higher Educational Institutions.	Government of Telangana State	Institute for Academic Excellence, Hyderabad	Collegiate Education & Technical Education Department,	21 st – 22 nd June 2021.	2 Days
29.	Nanomaterials and their Green Applications	MHRD	NITTTR, Chandigarh jointly with SBS State University, Ferozepur	Department of Applied Sciences. .	28 th March 2022 to 1 st April 2022.	1 week
30.	Green Energy and Materials	MHRD	NITTTR, Chandigarh jointly with SBS State University, Ferozepur	Department of Applied Sciences.	1 st May 2023 to 5 th May 2023.	1 week

