

# Annual Report

Dr SS Bhatnagar University Institute of Chemical Engg. &amp; Tech.

## Academic Year 2017 - 2018

### PROFORMA-I: Achievements of Faculty

S.no	Department	Name of Recipient	Name of Award/Recognition	Achievement Type	Achievement Level	Awarding Agency	Date of Award
1	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Prof. Anupama Sharma	Professor	Award	International	Asian Polymer Association	25/11/2017
2	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Prof. Urvashi Gupta	Professor	Award	National	FFI India	17/11/2017
3	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Prof. Urvashi Gupta	Professor	Award	National	FFI India	17/11/2017
4	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Dr. Gargi Ghoshal	Assistant Professor	Award	State	Panjab Univerity, Chandigarh	05/05/2018
5	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Dr. Amit Sobti	Assistant Professor	Award	State	Panjab Univerity, Chandigarh	05/05/2018
6	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Dr. Sanjeev Gautam	Associate Professor	Award	State	Panjab Univerity, Chandigarh	05/05/2018
7	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Assistant Professor	Editorial Board	Award	International	Heliyon, Journal Elsevier	08/06/2018

### PROFORMA-II: Lectures Delivered By Visiting Scholars

#### Lectures delivered by Visiting Scholars during the Academic Year 2017 - 2018

S.no	Department	Name	Address	Topic	Level	Place	Date(s)
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### PROFORMA-III: Extension Lectures

S.No	Department	Topic of Activity	Category of activity	Level of Activity	Duration in days	No. of participants	Institution/Place	Date(s)
1	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Rayleigh-Bénard Convection for Nanofluids: MHD And LTNE Effects, in 20th International Conference of International Academy of Physical Sciences (CONAIPS-XX)	Extension Lectures	National	2	60	University College of Science, Osmania University, Hyderabad-500 007, Telangana State, India.	14.07.2017 to 16.07. 2017
2	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Beauty of Mathematics and Fun with Mathematics	Extension Lectures	National	1	40	Department of Mathematics & Statistics, Himachal Pradesh University, Shimla-5	18.06. 2018

S.No	Department	Topic of Activity	Category of activity	Level of Activity	Duration in days	No. of participants	Institution/Place	Date(s)
3	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Binary MHD Nanofluids Convection: A Revised Model	Extension Lectures	National	1	35	Department of Mathematics & Statistics, Himachal Pradesh University, Shimla-5	18.06. 2018
4	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Environment & Our Responsibilities	Extension Lectures	State	1	30	Dev Samaj College of Education, Sector 36, Chandigarh	28.09.2017
5	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	High Performance Polymeric Materials from lignin and cellulose derived from Waste Lignocellulosic Biomass	Extension Lectures	International	3	300	International Conferences on Advances in Polymer Science and Technology (APA-2017), New Delhi	23.11.2017 to 25.11.2017
6	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Nano- Composites, Coatings & Potential Applications	Extension Lectures	State	1	32	NITTTR Chandigarh	16.11. 2017
7	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Nanotechnology- perspectives for a better Health Care	Extension Lectures	National	1	150	East West College of Pharmacy Bengaluru Karnataka	20.03.2018
8	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Non-Conventional Sources of Energy	Extension Lectures	Others	1	75	Department of Chemical Engineering Chandigarh University, Gharuan	13.04.2018
9	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Polyurethanes and their nanocomposites from Biobased Polyols: Efficient and environment friendly alternative	Extension Lectures	International	4	500	International Conferences on Advances in Sustainable Polymers (ASP-17), IIT Guwahati	08.01.2018 to 11.01. 2018
10	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Publishing a Research Paper in High Impact Factor Journal	Extension Lectures	National	1	45	Refresher Course for all Professional courses under UGC in Human Resource Development Centre, Panjab University Chandigarh	23.01.2018
11	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Researchers of new Era at UIET HRD Refresher course	Extension Lectures	National	1	45	UIET, Panjab University Chandigarh	06.01.2018
12	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	The Future Of Food System And Food Engineering Discipline.	Extension Lectures	National	1	30	Central Institute Of Agricultural Engineering, Bhopal	08.03. 2018
13	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Transition from Newtonian, Non Newtonian Fluids to Nanofluids and LTNE Effects-I	Extension Lectures	National	1	35	Department of Mathematics & Statistics, Himachal Pradesh University, Shimla-5	19.06.2018

## PROFORMA-IV: Faculty Positions

### Details of Faculty during the Academic Year 2017 - 2018

Designation	Faculty Name
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Designation	Faculty Name
Chairperson	Prof. Sanchita Chauhan
Professor (14)	Amritpal Toor (Ph.D.), Anupama Sharma (Ph.D.), Anupama Thakur (Ph.D.), Meenakshi Goyal (Ph.D.), Neeta Sharma (Ph.D.), R K Chhabra (Ph.D.), R K Wanchoo (Ph.D.), Ritu Gupta (Ph.D.), Sanchita Chauhan (Ph.D.), Seema Kapoor (Ph.D.), Sushil Kumar Kansal (Ph.D.), U S Shivhare (Ph.D.), Urvashi Gupta (Ph.D.), V K Rattan (Ph.D.)
Associate Professor (3)	Gaurav Verma (Ph.D.), Santanu Basu (Ph.D.), Subodh Kumar Aggrawal (Ph.D.)
Assistant Professor (13)	Sanjeev Gautam (Ph.D.), Amit Sobti (Ph.D.), Baljinder Kaur Gill (Ph.D.), Gargi Ghoshal (Ph.D.), Gaurav Rattan (Ph.D.), Harjit Kaur (NET), Harpreet Kaur (M.Sc.), Jodh Singh (M.E.), Maninder Kaur (M.E.), Nidhi Singhal (PG Diploma), Sonia Sharma (Ph.D.), Surinder Singh (M.E.), Twinkle Bedi (M.E.)
(3)	Bhawana Agrawal (Ph.D.), Navneet Kaur (M.E.), Neha Mahajan (M.E.)

## PROFORMA-V: Student Enrollment

### Program Level Student Enrollment during the Academic Year 2017 - 2018

#	Department	Program	General			SC			ST			OBC			PWD			Others (Miscellaneous)			Foreign + NRI Students			Total		
			M	F	TG	M	F	TG	M	F	TG	M	F	TG	M	F	TG	M	F	TG	M	F	TG	M	F	TG
1	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	B.E. (Chemical Engineering) - 1	45	7	0	12	2	0	5	1	0	3	1	0	1	0	0	13	4	0	0	0	0	79	15	0
2	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	B.E. (Chemical Engineering) - 2	38	17	0	10	2	0	5	2	0	2	2	0	0	0	0	9	4	0	0	0	0	64	27	0
3	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	B.E. (Chemical Engineering) - 3	36	15	0	8	3	0	6	0	0	3	0	0	0	0	0	6	4	0	0	0	0	59	22	0
4	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	B.E. (Chemical Engineering) - 4	39	15	0	9	3	0	1	2	0	3	1	0	1	0	0	8	3	0	0	0	0	61	24	0
5	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	B.E. (Food Technology) - 1	16	12	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	18	12	0
6	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	B.E. (Food Technology) - 2	9	7	0	3	2	0	1	0	0	1	1	0	0	0	0	4	2	0	0	0	0	18	12	0

#	Department	Program	General			SC			ST			OBC			PWD			Others (Miscellaneous)			Foreign + NRI Students			Total				
			M	F	TG	M	F	TG	M	F	TG	M	F	TG	M	F	TG	M	F	TG	M	F	TG	M	F	TG		
7	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	B.E. (Food Technology) - 3	9	11	0	0	3	0	0	1	0	1	1	0	0	0	0	3	3	0	0	0	0	0	0	13	19	0
8	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	B.E. (Food Technology) - 4	6	9	0	5	0	0	0	0	0	1	1	0	0	0	0	4	1	0	0	0	0	0	16	11	0	
9	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	B.E. Integrated (Chemical + MBA) - 1	12	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	10	0	
10	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	B.E. Integrated (Chemical + MBA) - 2	13	9	0	3	0	0	0	1	0	0	2	0	0	0	0	4	4	0	0	0	0	0	20	16	0	
11	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	B.E. Integrated (Chemical + MBA) - 3	13	5	0	4	2	0	1	0	0	2	0	0	0	0	0	1	5	0	0	0	0	0	21	12	0	
12	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	B.E. Integrated (Chemical + MBA) - 4	16	4	0	3	1	0	0	1	0	2	0	0	0	0	0	3	2	0	0	0	0	0	24	8	0	
13	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	B.E. Integrated (Chemical + MBA) - 5	9	11	0	2	3	0	0	0	0	1	0	0	0	0	0	2	4	0	0	0	0	0	14	18	0	
14	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	M.E. (Chemical Engineering) - 1	7	4	0	3	0	0	1	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	11	7	0	
15	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	M.E. (Chemical Engineering) - 2	2	6	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	6	0	

#	Department	Program	General			SC			ST			OBC			PWD			Others (Miscellaneous)			Foreign + NRI Students			Total		
			M	F	TG	M	F	TG	M	F	TG	M	F	TG	M	F	TG	M	F	TG	M	F	TG	M	F	TG
16	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	M.E. (Food Technology) - 1	2	2	0	2	1	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	6	4	0
17	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	M.E. (Food Technology) - 2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	4	0	
18	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	M.Sc. (Industrial Chemistry) - 1	7	7	0	1	1	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	9	10	0	
19	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	M.Sc. (Industrial Chemistry) - 2	7	8	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	0	0	8	11	0	
<b>Grand Total</b>			<b>287</b>	<b>162</b>	<b>0</b>	<b>67</b>	<b>23</b>	<b>0</b>	<b>20</b>	<b>8</b>	<b>0</b>	<b>24</b>	<b>11</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>59</b>	<b>44</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>459</b>	<b>248</b>	<b>0</b>	

## PROFORMA-VI: Summary of Publications

### Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.

Dr. S.S. Bhatnagar University Institute of Chemical Engineering and Technology (SSBUICET) (formally known as Department of Chemical Engineering and Technology (DCET)) was established in 1958 in collaboration with a leading Institute of Engineering Education in USA, the Illinois Institute of Technology, Chicago. Professor R.E. Peck from IIT Chicago joined as the first Head of Department. Later in 1999, in view of the growing demand Undergraduate programme in Food Technology was introduced and in 2007, Five year integrated programme of Bachelors degree in Chemical Engineering with MBA was introduced. The institute has been bestowed with numerous projects like TEQIP-III, a World Bank Project, Special assistance Grant from UGC, FIST from DST and individual grants from AICTE, UGC, DST, IUAC, MoFI, CSIR etc.

### Publications: Books (with / without ISBN)

### Publications: Books Chapters

Shivhare, Uma & Santanu Basu, Associate Professor, (2018), Apple Academic Press, USA, Rheological and Textural Properties of Milk Gels. In: Technological Interventions in Dairy Science: Innovative Approaches in Processing, Preservation, and Analysis of Milk Products" Chapter No 11. In Press. Apple Academic Press, USA, 2017.

Gaurav Verma, Associate Professor, (2017), Springer, Self-healed materials from elastomeric composites. Smart Polymer Nanocomposites-Energy harvesting, Self-healing and Shape memory, Pages 219-242, Springer 2017

### Publications: Books Edited

### Publications: Research Papers in Peer Review Journals

Neeta Sharma, Professor, (2018), Journal of Environmental Chemical Engineering, Removal of ciprofloxacin hydrochloride from aqueous solution using vertical bed and sequential bed columns. Journal of Environmental Chemical Engineering, 6:4391-4398

Neeta Sharma, Professor, (2018), Indian Chemical Engineer, Batch adsorption studies on the removal of ciprofloxacin hydrochloride from aqueous solution using ZnO nanoparticles and groundnut (Arachis hypogaea) shell powder: a comparison, Indian Chemical Engineer, Jan 2018.

**Publications: Research Papers in Peer Review Journals**

Neeta Sharma, Professor, (2017), Indian Chemical Engineer, Effect of Fe(II) on the Adsorption of Mn(II) from Aqueous Solution Using Esterified Saw Dust: Equilibrium and Thermodynamic Studies, Indian Chemical Engineer, 60:255-268 (2018).

Anupama Kaushik, Professor, (2018), Trends in Carbohydrate Research, Poly lactide: Ring Opening Polymerization of Lactide using Zinc (II) octoate as Catalyst and Optimization of Reaction Parameters, Trends in Carbohydrate Research, 10(2):9-17 (2018)

Anupama Kaushik, Professor, (2018), Journal of Biological Macromolecules, L-Cysteine functionalized bagasse cellulose nanofibers for mercury(II) ions adsorption, International Journal of Biological Macromolecules, 112: 728-736 (2018).

Anupama Kaushik, Professor, (2018), Materials Science for Energy Technologies, Preparation, characterization and trifluralin degradation of laccase-modified cellulose nanofibers, Materials Science for Energy Technologies, 1:29-37 (2018).

Anupama Kaushik, Professor, (2017), International Journal of Biological Macromolecules, Simultaneous Extraction of Lignin and Cellulose Nanofibrils from waste jute bags using One Pot Pre-treatment, International Journal of Biological Macromolecules; 2018, 107 (Part A), 1294-1301 (2018).

Anupama Kaushik, Professor, (2017), Arabian Journal of Chemistry, Enhanced catalytic activity of composites of NiFe<sub>2</sub>O<sub>4</sub> and nano cellulose derived from waste biomass for the mitigation of organic pollutants, Arabian Journal of Chemistry, In Press (2018).

R.K. Wanchoo & Ritu Gupta, Professor, (2018), Journal of Thermal Engineering, Heat Transfer Characteristics of Propylene Glycol/Water Based Magnesium Oxide Nanofluid Flowing through Straight Tubes and Helical Coils, Journal of Thermal Engineering, 4: 1737-1755 (2018).

Ritu Gupta & R.K. Wanchoo, Professor, (2018), Journal of Nanofluids, Forced Convective heat transfer studies on glycol based Al<sub>2</sub>O<sub>3</sub> nanofluids flowing through straight tubes and helical coils in Journal of Nanofluids, 7: 37-51 (2018).

Gaurav Verma, Associate Professor, (2018), International Journal of Hydrogen Energy, Supramolecular Modification of Carbon Nanofibers with Poly(diallyl dimethylammonium) Chloride and Triton X-100 for Electrochemical Application. International Journal of Hydrogen Energy 43(13), 6575-6585 (2018).

Gaurav Verma, Associate Professor, (2018), Materials for Renewable and Sustainable Energy, Facile Synthesis of Mesoporous Carbon Material from treated Kitchen waste for Energy Applications. Materials for Renewable and Sustainable Energy, 7(9): (2018).

Gaurav Verma, Associate Professor, (2017), Journal of the Science of Food and Agriculture, Multi-walled carbon nanotubes applied through seed-priming influence early germination, root hair, growth and yield of bread wheat (*Triticum Aestivum* L.) Journal of the Science of Food and Agriculture, 98: 3148-3160 (2018).

Meenakshi Goyal & Gargi Ghoshal, Assistant Professor, (2017), Journal of Nanomedicine & Nanotechnology, Rapid Green Synthesis of Silver Nanoparticles (AgNPs) Using (*Prunus persica*) Plants extract: Exploring its Antimicrobial and Catalytic Activities. Journal of Nanomedicine & Nanotechnology, 8 (4): 852-859 (2017).

Gaurav Rattan, Assistant Professor, (2017), Iranian Journal of Catalysis, Activity of Cu – Co – M ( M- Ce, Ni, Au, Mg) catalysts prepared by Co – Precipitation method calcined at high temperature for Co Oxidation”, Iranian Journal of Catalysis, 7(4): 249 – 255 (2017)

Gargi Ghoshal, Assistant Professor, (2018), Nutrition and Food Science, Emerging trends in food packaging. Nutrition and Food Science, Accepted April (2018).

Amrit Pal Toor, Professor, (2018), Environment Development and Sustainability, Techno-economic evaluation of anatase and p25 TiO<sub>2</sub> for treatment basic yellow 28 dye solution through heterogeneous photocatalysis Environment Development and Sustainability June (2018)

Amrit Pal Toor & R.K. Wanchoo, Professor, (2018), Solar Energy, Solar assisted degradation of carbendazim in water using clay beads immobilized with TiO<sub>2</sub> & Fe doped TiO<sub>2</sub>, Solar Energy 162:45-56 (2018)

Amit Sobti, Amrit Pal Toor & R.K. Wanchoo, Professor, (2018), Chemical Engineering Research and Design, Studies on Glycerol Conversion to Tricaproin over Sulfate promoted Iron Oxide as catalyst using Response Surface Methodology, Chemical Engineering Research and Design, 132:276-284 (2018)

Amrit Pal Toor, Professor, (2018), Journal of Solar Energy Engineering, Concentrating and Nonconcentrating Slurry and Fixed-Bed Solar Reactors for the Degradation of Herbicide Isoproturon, Journal of Solar Energy Engineering, 140: 021006-1-9 (2018)

Amrit Pal Toor & R.K. Wanchoo, Professor, (2017), Industrial & Engineering Chemistry Research, Enhancement in Conversion and Selectivity of Trivalerin Using Reactive Distillation, Industrial & Engineering Chemistry Research, 56: 12488-12494 (2017).

Sanjeev Gautam, Assistant Professor, (2018), Journal of non linear optical physics and Materials, Enhancement of third-order nonlinear optical properties of HMTA stabilized pure and doped ZnS nanoparticles and their electronic structures, Journal of non linear optical physics and Materials, 27 (2018)

Sanjeev Gautam, Assistant Professor, (2018), Applied Organometallic Chemistry, Oxido-peroxido W(VI)-histidine-MgAl-layered double hydroxide composite as an efficient catalyst in sulfide oxidation, Applied Organometallic Chemistry, 32 (2018)

Sanjeev Gautam, Assistant Professor, (2018), Heliyon, Structural and electronic investigation of ZnO nanostructures synthesized under different environments, Heliyon, 4 (2018)

Sanjeev Gautam, Assistant Professor, (2017), Journal of synchrotron Radiation, Surface plasmon band tailoring of plasmonic nanostructure under the effect of water radiolysis by synchrotron radiation, Journal of synchrotron Radiation, 24: 1209-1217 (2017)

Sanjeev Gautam, Assistant Professor, (2018), Journal of Chemical Research, Simple preparation of cuprous oxide nanoparticles for catalysis of azide-alkyne cycloaddition, Journal of Chemical Research, 42 :166-169 (2018)

Sanjeev Gautam, Assistant Professor, (2018), Scientia Iranica, SBA-15-supported copper (II) complex: An efficient heterogeneous catalyst for azide-alkyne cycloaddition in water, Scientia Iranica, 25:1335-1343 (2018)

Sushil K. Kansal, Professor, (2017), New Journal of Chemistry, Visible light driven photocatalytic degradation of fluoroquinolone levofloxacin drug using Ag<sub>2</sub>O/TiO<sub>2</sub> quantum dots: a mechanistic study degradation pathway, New Journal of Chemistry, 41: 12079-12090(2017)

**Publications: Research Papers in Peer Review Journals**

Sushil K. Kansal, Professor, (2017), Material Research Bulletin, Solar light driven photocatalytic degradation of Ofloxacin based on ultra-thin bismuth molybdenum oxide nanosheets, Material Research Bulletin,99:359-366(2018)

Sushil K. Kansal, Professor, (2017), Bioresource Technology, Improved levulinic acid production from agri-residue biomass in biphasic solvent system through synergistic catalytic effect of acid and products, Bioresource Technology,251:143-150(2018)

Sushil K. Kansal, Professor, (2018), Journal of alloys and compounds, Photoluminescent C-dots: An overview on the recent development in the synthesis, physicochemical properties and potential applications, Journal of alloys and compounds,748:818-853(2018)

Surinder Singh & Sushil K. Kansal, Professor, (2017), American Scientific Publishers, Visible-Light Photocatalytic Degradation of Organic Pollutants Using Molybdenum Disulfide (MoS<sub>2</sub>) Microtubes

Maninder Kaur, Assistant Professor, (2018), Journal of Emerging Technologies & Innovative Research 5(6): 356-360 , Sustainable Practices for management of rice straw

Amrit Pal Toor, Professor, (2018), Journal of Materials Science, Assessment of integrated binary process by coupling photocatalysis and photo-Fenton for the removal of cephalixin from aqueous solution, Journal of Materials Science, 53: 7326-7343 (2018)

**Publications: Research Papers in Non Peer Review Journals****Publications: Research Papers in E-Journals****Publications: Papers Published in Proceedings of Conferences**

Gaurav Verma, Associate Professor, (2018), AIP Conference Proceedings 1953 , Detection of gold nanoparticles signal inside wheat (*Triticum Aestivum*.L) and oats (*Avena sativa*) seedlings." AIP Conference Proceedings 1953 (doi: 10.1063/1.5032393), 030058-4

Maninder Kaur & Sanchita Chauhan, Professor, (2018), International Symposium on Functional Materials, Effect of various Pretreatment methods on Biogas Production from sugarcane Bagasse (April 13-15), 2018 Hotel Shivalikviw, Chandigarh

S.no	Department	Publication Type	International	National	State	Others	Total
1	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Publication (Chapter in a book)	2	0	0	0	2
2	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Publication (Conference Proceedings)	2	0	0	0	2
3	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Publication (Peer Review Journals)	34	0	0	0	34

**PROFORMA-VII: Research Schemes****Sponsored Research Projects during the Academic Year 2017 - 2018**

S.No.	Department	Funding Agency	Name of Project	Outlay (INR)	Funds Sanctioned (INR)	Type	Status	Duration(in years)	Research Team	Principal Investigator
1	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	DST	Providing potable water using functionalised cellulose as catalyst from locally available biomass	0	3400000	Major	Ongoing	36		Prof. Anupama Sharma
2	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	CSIR	Microwave Assisted Green Synthesis of Shape Memory Biodegradable Polyurethanes and their Nanocomposites	1250000	1250000	Major	Completed	36		Prof. Anupama Sharma
3	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	UGC	Ionic substitution in nano dimensional hydroxyapatite for bone tissue engineering applications	1269577	1526000	Major	Ongoing	36		Prof. Seema Kapoor

S.No.	Department	Funding Agency	Name of Project	Outlay (INR)	Funds Sanctioned (INR)	Type	Status	Duration(in years)	Research Team	Principal Investigator
4	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	CSIR	Stability Analysis of Nanofluids: Analytical & Numerical Investigations	538312	1646000	Major	Ongoing	36		Prof. Urvashi Gupta
5	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	AICTE	MODROB	0	600000	Major	Ongoing	36		Prof. Sushil Kumar Kansal
6	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	DST-UT	Protective transparent nano-composite coatings for Chandigarh's buildings and structures.	128000	150000	Minor	Ongoing	24		Dr. Gaurav Verma
7	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	UGC-DAE	Electronic structure investigation of mixed Cu-co ferrosipinel(MFe204-type): XAFS Study	0	1164000	Major	Ongoing	48		Dr. Sanjeev Gautam
8	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	WORLD BANK	TEQIP-III	1300000	70000000	Major	Ongoing	45	Department Faculty	Prof. Amrit Pal Toor
9	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	UGC	SAP	0	11150000	Major	Ongoing	60	Department Faculty	Prof. Sanchita Chauhan

## PROFORMA-VIII: Seminars / Conferences / Symposia / Workshops Organized by the Department

### Details of Seminars, Conferences, and Workshops organized during the Academic Year 2017 - 2018

S.no	Department	Title of event	Type	Funding Agency	Level	Place	Date(s)	No. of Participating Faculty	No. of Papers Presented	No. of faculty acted as resource persons	Name of Organizer
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## PROFORMA-IX: Seminars / Conferences / Symposia / Workshops Attended by the Faculty

### Details of Seminars, Conferences, and Workshops attended by the Faculty during the Academic Year 2017 - 2018

S.no	Department	Name	Title of event	Type	Level	Place	Date(s)	Organized By
1	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Prof. Neeta Sharma	R,C, Paul National Symposium	seminar	National	PU, CHandigarh	22-23.02.2018	Department of Chemistry & Centre of Advanced Studies in Chemistry, Panjab University, Chandiga



S.no	Department	Name	Title of event	Type	Level	Place	Date(s)	Organized By
2	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Prof. Neeta Sharma	International Conference NanoSciTech-2017	conference	International	PU, CHandigarh	8-10.11.2017	Panjab University, Chandigarh, India
3	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Prof. Urvashi Gupta	International Academy of Physical Sciences	conference	International	Osmania University, Hyderabad	14-16.7.2017	University College of Science, Osmania University, Hyderabad Telangana State, India
4	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Dr. Gaurav Verma	ISFM 2018	conference	International	Chandigarh	3-15.04.2018	IIT Kanpur & PU, Chandigarh India
5	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Dr. Gaurav Verma	ICONSAT 2018	conference	International	Bengaluru	21-23.03.2018.	IISc Bengaluru India
6	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Dr. Gargi Ghoshal	3rd National Conference On Contemporary Food Processing and Preservation technologies	conference	National	Solan	12-13. 04. 2018	School of Bioengineering and Food Technology, Shoolini University, Solan (HP)
7	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Dr. Gargi Ghoshal	CHASCON-2018	conference	State	PU, CHandigarh	11-13.02.2018	Panjab University, Chandigarh
8	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Dr. Gargi Ghoshal	Nanosci Tech-2017	conference	International	PU, CHandigarh	8-10.11. 2017	Panjab University, Chandigarh
9	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Mrs. Maninder Kaur	ISFM-2018	conference	International	Chandigarh	13-15.04.2018	IIT Kanpur & PU, Chandigarh India
10	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Dr. Gaurav Rattan	ICETCS	conference	International	Karnataka	14-16.09.2017	Manipal Institute of Technology, Manipal, Karnataka
11	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Dr. Gaurav Rattan	CHEMCON 2017	conference	International	West Bengal	27- 30.12.2017	Haldia Institute of Technology, West Bengal.
12	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	Dr. Amit Sobti	Egrwmse 2018	conference	International	NIT, Jalandhar	29.03.2018 to 31.03.2018	NIT, Jalandhar

## PROFORMA-X: Ph.D. Awards

### Research Scholars Awarded Doctorate during the Academic Year 2017 - 2018

S.No.	Department	Name of Candidate	Title of the Thesis	Gender	Category	Nationality	Supervisor(s)
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**PROFORMA-XI: Miscellaneous****1. Any other noteworthy achievement of the department during this Academic Year 2017 - 2018**

S.no	Department	Achievement
1	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	TEQIP-III, UGC-SAP, 59 NIRF Ranking-2018

**2. Details of increase in infrastructure facilities during the Academic Year 2017 - 2018**

Facilities	Existing	Newly Created/Added	Sources of Funds	Total
Class rooms	1	0	0	1
Class rooms with ICT facility	8	0	0	8
No. of Research Labs	13	0	0	13
No. of Computer labs	2	0	0	2
No. of Common rooms	1	0	0	1
No. of Rooms for Research Scholars	0	0	0	0
Total no. of Rooms for Staff/faculty	27	0	0	27
No. of Other rooms (specify)	0	0	0	0
Total no. of rooms	52	0	0	52
Total Number of Computers in the department	85	0	0	85

Facilities for Differently abled					
Ramp/Rails	Toilets	Wheel Chairs	Lifts	Rest Rooms	Braille Software

**3. Summary of Seminars / Conferences / Symposia organized by Department during the Academic Year 2017 - 2018**

S.No	Department	International	National	State	University	Others	Total

**4. Summary of Faculty served as Experts, Chairpersons, Resource Persons at Seminars / Conferences / Symposia organized by Department during the Academic Year 2017 - 2018**

S.No	Department	Level	No. of Participating Faculty	No. of Papers Presented	No. of faculty acted as resource persons

**5. Summary of Seminars / Conferences / Symposia attended by Department during the Academic Year 2017 - 2018**

S.No	Department	International	National	State	University	Others	Total
1	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	9	2	1	0	0	12

**7. Number of Collaborations during the Academic Year 2017 - 2018**

S.No	Department	Level	Total

**8. Number of Linkages created during the Academic Year 2017 - 2018**

S.No	Department	International	National	Industrial	Total

**9. Number of Research Awards / Recognitions received by Faculty Research Scholars during the Academic Year 2017 - 2018**

S.No	Category	Achievement	Total Awards / Recognitions

**10. Number of Faculty who are Ph.D. Guides and Scholars Registered under them during the Academic Year 2017 - 2018**

S.No	Department	Research Guides	Research Scholars
1	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	17	23

**11. Number of students qualified in these examinations during the Academic Year 2017 - 2018**

S.No	UGC / CSIR (NET / JRF)	SET	GATE	CAT	GPAT	Military	Civil Services	Any Other All-India Service	State Civil Services	Other
1	0	0	13	6	0	0	0	0	0	0

**12. Number of students placed during the Academic Year 2017 - 2018**

Placement Type	Number of Organizations Visited	Number of Students Participated	Number of Students Placed
Off-Campus	2	6	6
On-Campus	30	106	89
<b>Grand Total</b>	<b>32</b>	<b>112</b>	<b>95</b>

**13. Innovations introduces during this Academic Year 2017 - 2018 that have created a positive impact on the functioning of the institution. Give Details.**

S.no	Department	Innovations introduced
1	Dr SS Bhatnagar University Institute of Chemical Engg. & Tech.	