

**Name :** Dr. Ashish Bhatnagar  
**Designation :** Professor and Director Algae Biofuel Biomolecules Centre  
**Department :** Microbiology  
**Institute :** Maharshi Dayanand Saraswati University, Ajmer  
**Date of Birth :** 17/06/1965 **Sex (M/F):** Male  
**SC/ST:** N

**Education Details :**

S.No.	Institution Place	Degree Awarded	Year	Field of Study
1	Indian Agricultural Research Institute, New Delhi	MSc Microbiology	1989	Algology(Thesis: Solubilization of calcareous substrate in salt affected soils by cyanobacteria)
2	Indian Agricultural Research Institute, New Delhi	PhD Microbiology	1993	Algology (Thesis: Ecophysiological studies on microalgae of polluted habitats)

**Employment Details :**

S.No.	Institution/Place	Position	From (Date)	To (date)
1	Maharshi Dayanand Saraswati University Ajmer	Assistant Professor Microbiology	02/11/1993	27/07/1998
2	Maharshi Dayanand Saraswati University Ajmer	Asstt Professor Senior Scale Microbiology	28/07/1998	07/05/2007
3	Maharshi Dayanand Saraswati University Ajmer	Associate ProfessorMicrobiology	08/05/2007	31/7/2015
4	Maharshi Dayanand Saraswati University Ajmer	ProfessorMicrobiology	01/09/2015	Till Date

**Honors/Awards :**

<b>Dr. Ashish Bhatnagar</b>		
	<b>No.</b>	<b>Description</b>
A) International	3	PDRA:Univ of Georgia, Athens USA09.10. 2008 to 09.09.2009. Algae Biofuel Production, Biorefining & Carbon Cycling Program Best Paper Int J Mol Sci Third Prize 2009 Paper listed 16th in Top 25 Science Direct Jan-Mar 2010
B)National	14	as per the list appended
<b>Honours / Awards Uploaded : <a href="#">patents</a> <a href="#">awards</a> <a href="#">research</a></b>		

<b>Publications: 44 (List of publications relevant to the project)</b>			
<b>Title of Paper</b>	<b>Author</b>	<b>Reference of journal</b>	<b>Year</b>
A communal catalogue reveals Earth's multiscale microbial diversity	Luke R. Thompson, Jon G. Sanders et al. and The Earth Microbiome Project Consortium	<b>Nature</b> 551: 457-463 JIF 40.137	2017
Evaluation of Moringa oleifera seed biopolymer-PVA composite hydrogel in wound healing dressing	Laxmi Parwani, Monica Bhatnagar, Ashish Bhatnagar, Veena Sharma, Vinay Sharma	<b>Iranian Polymer Journal</b> 25 (11):919-931 JIF 1.422	2016
Microbial Diversity in Soil, Sand Dune and Rock Substrates of the Thar Monsoon Desert, India	Subramanya Rao, Yuki Chan, Donnabella C. Bugler-Lacap, Ashish Bhatnagar, Monica Bhatnagar, Stephen B. Pointing	<b>Indian Journal of Microbiology</b> 56 (1):35-45 JIF 1.290	2015
Wound Dressings from Algal Polymers	Monica Bhatnagar, Ashish Bhatnagar	<b>Marine Algae Extracts: Processes, Products, and Applications.</b> Se-Kwon Kim, Katarzyna Chojnacka(eds). Wiley VCH pp 523-556	2015
Solid Surfaces Alleviate Thermal Stress in Desert Microalgae.	Bhatnagar, Ashish; Bhatnagar, M; Garg, MK	<b>International Journal on Algae.</b> 16 (1): 68-85	2014
Exopolymers from Tolypothrix tenuis and three Anabaena sp.(Cyanobacteriaceae) as novel blood clotting	Bhatnagar, M; Parwani, L; Sharma, V; Ganguly, J; Bhatnagar, Ashish.	<b>Carbohydrate Polymers.</b> 99: 692-699. JIF 4.811	2014

agents for wound management.			
Effect of cell rupturing methods on the drying characteristics and lipid compositions of microalgae.	Viswanathan T, Mani S, DaskKC, ChinnasamyS,BhatnagarA, SinghRK, SinghM.	<b>Bioresource Technology</b> .126 (2012):131-136. JIF 5.651	2012
Renewable biomass production by mixotrophic algae in the presence of various carbon sources and wastewaters.	Ashish Bhatnagar, Senthil Chinnasamy, Manjinder Singh, K.C. Das.	<b>Applied Energy</b> 88 (11): 3632-3635. JIF 7.182	2011
Biochemical stimulants for enhancing biomass productivity in microalgae for biofuel and biotechnology applications.	Ryan W. Hunt, Senthil Chinnasamy, Ashish Bhatnagar, K.C. Das.	<b>Applied Biochemistry &amp; Biotechnology</b> 162:2400-2414. JIF 1.751	2010
Biomass and bioenergy production potential of microalgae consortium in open and closed bioreactors using untreated carpet industry effluent as growth medium.	Senthil Chinnasamy, Ashish Bhatnagar, Ronald Claxton and K.C. Das.	<b>Bioresource Technology</b> 101: 6751-6760. JIF 5.651	2010
Microalgae cultivation in a wastewater dominated by carpet mill effluents for biofuel applications.	Senthil Chinnasamy, Ashish Bhatnagar, Ryan W. Hunt and K.C. Das.	<b>Bioresource Technology</b> 101: 3097-3105. JIF 5.651	2010
Chlorella minutissima—A Promising Fuel Alga for Cultivation in Municipal Wastewaters.	Ashish Bhatnagar, Monica Bhatnagar, Senthil Chinnasamy and K. C. Das.	<b>Applied Biochemistry &amp; Biotechnology</b> 161 (1) : 523-536. JIF 1.751	2010
Electromagnetic Biostimulation of Living Cultures for Biotechnology, Biofuel and Bioenergy Applications.	Hunt R.W., Zavalin, A., Bhatnagar Ashish, Chinnasamy Senthil and Das Keshav C.	<b>International Journal of Molecular Sciences</b> 10: 4515-4558. JIF 2.339	2009
Biomass production potential of a wastewater alga Chlorella vulgaris ARC 1 under elevated levels of CO <sub>2</sub> and temperature	Chinnasamy S., Ramakrishnan B., Bhatnagar A. & Das Keshav C.	<b>International Journal of Molecular Sciences</b> 10(2): 518-532. JIF 2.339	2009

<b>Project(s) being pursued/carried out by Investigator</b>	
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Title of Project	Funding Agency	From Date	To Date	No. of Scientists	Approved Cost
Developing low water demanding cultivation system for algae in Rajasthan	DBT, GOI	30.1.2017	31.7.2018	3	46.45 lakh
Moist bioactive cellulose biocomposites for advanced wound care	Parenteral Drug Association India	20.3.17	19.3.2022	2	50.00 lakh

### Professional Experience and Training relevant to the Project

Majored in Algology during M.Sc. and Ph.D. worked on microalgal biodiversity of arid and semi-arid regions in the DBT funded projects in 1999-2001 and on low water demanding cultivation systems for algae since 2017-18. Worked with Dr. KC Das at University of Georgia (10 months)

**Ph.D. awarded:**4, enrolled: 1

**PDF enrolled:** Nil

### PATENTS

**US Patent Granted :**Method and System of Culturing an Algal Mat. Das, Cannon, Bhatnagar and Chinnasamy 13 May 2014, US 8,722,389 B1 Method uses artificially generated fog to cultivate algae

### Awards/Recognitions

- **Amongst Top 25 of Science Direct** Science Direct listed [Microalgae cultivation in a wastewater dominated by carpet mill effluents for biofuel applications](#). By Chinnasamy, S.; **Bhatnagar, A.**; Hunt, R.W.; Das, K.C. *Bioresource Technology*,101 (9): 2010:3097-3105  
**Science Direct:** A service for Elsevier Journals with a database of 2500 journals and 11 million users worldwide. Updates its list of top 25 hottest Articles based on number of downloads of an article. It has 236 journals in Agricultural and Biological Sciences
- **Third best paper award** by International Journal of Molecular Science, 2013
- **Rotary Club Ajmer Metro Certificate of Appreciation** for outstanding performance in the field of education 2016
- **Young Scientist (Bioenergy) Award**, 2010: Society for Plant Research
- **Commonwealth Academic staff fellowships** Reserve list for the project titled

Cyanobacterial Biofilms: Architecture and Response to Stress 2007

- **Selected as Senior Manager** for Algal Biofuels Project of Reliance Energy, Hyderabad at Kakinada, but did not join **2007**
- **IARI Senior Research Fellow** 1989-93 for Ph D in Microbiology
- Qualified CSIR-UGC National Eligibility Test for lecturership in Life Sciences 1990
- **IARI Gold medal** 1989 for Overall performance in M.Sc. Microbiology
- **IARI Junior Research Fellow** 1987-89 for M.Sc. in Microbiology
- **Aspee Gold medal** 1987 for obtaining maximum marks during B.Sc. (Ag) at JN Agriculture University Jabalpur in courses of Entomology and Plant Pathology
- **Bank of Baroda Cash prize** 1987 for obtaining maximum marks during B.Sc. (Ag) at JN Agriculture University Jabalpur in courses of Economics
- **University Merit scholarship** from 1984-1987 during B.Sc. (Ag) at JN Agriculture University, Jabalpur (M.P.)
- **2nd best poster award** to Neetu Manglani for the poster paper titled Production and optimization of alkaline serine keratinase exhibiting potential dehairing activity. Neetu Mangalani, Monica Bhatnagar, **Ashish Bhatnagar** in the International Conference on Biotechnology: A rendezvous with Basic Sciences for Global Prosperity. 26-27 Dec 2012, New Delhi. Society for Plant Research, New Delhi
- **Third Best Poster Award** to Laxmi Parwani in the International Conference on Biotechnology: A Rendezvous with Basic Sciences for Global Prosperity for the Poster paper titled Potential of Gum Acacia in wound management: A new approach by Laxmi Parwani, Monica Bhatnagar, **Ashish Bhatnagar** held at NASC Complex, New Delhi December 26-27, 2012
- **Third position for Young Scientist Award** to Laxmi Parwani in the International Conference on Microorganisms in Environmental Management and Biotechnology for the oral presentation titled Biocompatible polymers from desert cyanobacteria for wound management by Laxmi Parwani, Monica Bhatnagar, **Ashish Bhatnagar**, Vinay Sharma held at Barkatullah University Bhopal July 1-3, 2011
- **Third Best Poster Award** to Laxmi Parwani for the poster paper titled A novel biocompatible wound dressing based on gum Acacia by Laxmi Parwani, Monica Bhatnagar, **Ashish Bhatnagar**, Vinay Sharma in the International Conference on Green Chemistry at Jaipur organized by Central University of Rajasthan December 7-9, 2011