

RESUME



1. Name : Dr. Sanjay Kumar
2. Designation (Present) : Post-Doctoral Research Associate, IIT Delhi
3. Date of Birth : 10th March 1989
4. Languages Known : English, Hindi

5. Academic Details (Qualifications and research / teaching experience)

Degree / Assignment	University	Subject Studied & CGPA obtained/area of research /sub-jects taught	Year	Experience	
				Research	Teaching
B. Tech.	VIT University, Vellore	Biotechnology (7.89/10)	2008-12		
M.Tech.	IIT Guwahati	Biotechnology (with specialization in biofuel production using dairy wastewater) (9.22/10)	2012-14	01 year	
Ph.D.	IIT Delhi	Thesis title: Scale-up of PHB production using different bacterial species	2014-2021 Submitted in September, 2020. Viva held on 9 March, 2021.	06 years	
Undergraduate and post graduate Teaching	IMS engineering College, Ghaziabad	Bioprocess Engineering, Bioreactor analysis and design, Fermentation Biotechnology, Indian polity	25 January 2020- 28 June 2021	06 months	01Year, 05 months, & 03 days
Undergraduate Teaching	NIT, Andhra Pradesh	Bioprocess Engineering, Fermentation Biotechnology	5 July 2021-16 October 2021	-	03 months 11 days
Post-doctoral Research	IIT Delhi	Continuous production of bio-therapeutics	17 October 2021- Present		-

Total teaching experience: 01 Years 08 Months and 14 Days

Total research experience: 07 Years 06 Months

6. **GATE Qualified** : Yes (2011, 2012)

7. **Administrative experience**

Designation	Organization	Tenure	Experience
M. Tech. Program co-ordinator (Biotechnology)	IMS Engineering College, Ghaziabad	January 2021- June 2021	06 months
Faculty Advisor	NIT Andhra Pradesh	5 th July 2021 – 16 October 2021	03 months 11 days

8. **Field of Specialization:**

- (a) **Teaching:** Bioprocess Engineering, Fermentation Biotechnology, Bioreactor analysis and design, Scale-up.
- (b) **Present research interests:** Production, extraction and characterization of Biopolymers from renewable carbon sources, Scale up of Biopolymers, Production of Biofuel/Biodiesel from waste streams/agricultural waste, Production of biotherapeutics/biosimilars, Recombinant Vaccines.
- (c) **Future research interests:** Production of monoclonal antibodies and antibiotics, Waste to energy generation, Solid waste management, Wastewater treatment, Production of biopolymers, nanotechnology, etc.

9. **Awards/Distinctions received/achieved:**

- (i) GATE Fellowship provided by MHRD (2012-14) in Department of Biotechnology, IIT Guwahati, Assam.
- (ii) Awarded Junior Research Fellowship (2014-17) in Department of Biochemical engineering and Biotechnology, IIT Delhi, New Delhi.
- (iii) Awarded Senior Research Fellowship (2014-17) in Department of Biochemical engineering and Biotechnology, IIT Delhi, New Delhi.
- (vi) International Travel Grant to present research findings in international conferences: MHRD, New Delhi - 01
- (v) Secured **2nd position in Hunt the junk** at Tryst 2015, Annual Science, Technology and Management Festival of **IIT Delhi**.
- (vi) Secured **2nd position in Bio entrepreneur** at Tryst 2015, Annual Science, Technology and Management Festival of **IIT Delhi**.

- 10. Publications** Research articles - 02
Review article - 03
- 11. Book** 1 (ISBN: 9781119901198)
- 12. Book chapters** 6 (Accepted in Wiley, Bentham Sciences, Taylor & Francis)
- 13. Review papers (in process)** 1
- 14. Conferences attended**
- | | |
|---------------------------|------|
| International - 04 | |
| Prague, Czech Republic | - 01 |
| Stockholm, Sweden | - 01 |
| Pune, India | - 01 |
| Vellore, India | - 01 |

National - 04

- 15. Faculty Development Program (FDP) organized** 1

- 16. Workshop organized** 1

- 17. B. Tech project Supervision:** 2

- 18. Address for communication:** **Dr. Sanjay Kumar**
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District – Bharatpur, State – Rajasthan,
PINCODE- 321201

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- 20. Contact telephone number** : +91-9953250041

21. Family details:

Father: Mr Ranveer Singh (Govt. Teacher)

Mother: Mrs Kamalesh Devi (House Wife)

Wife : Mrs Shraddha Singh (House Wife)

22. References:

Prof. A. K. Srivastava

Emeritus Professor

Biotechnology Division, Netaji Subhas University of Technology, 110078, New Delhi, India

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22 March, 2021

Dr. Sanjay Kumar

Publications

Total Cites: 101 h-index : 2 i10- index : 2

1. Bishwambhar Mishra, Awdhesh Kumar Mishra, **Sanjay Kumar**, Sanjeeb Kumar Mandal, Lakshmayya NSV, Vijay Kumar, Kwang-Hyun Baek, and Yugal Kishore Mohanta. Antifungal Metabolites as Food Bio-Preservative: Innovation, Outlook, and Challenges. *Metabolites* 2022, 12(1), 12.
2. **Sanjay Kumar**, Nikhil Gupta, Kannan Pakshirajan. Simultaneous lipid production and dairy wastewater treatment using *Rhodococcus opacus* in a batch bioreactor for potential biodiesel application. **Journal of Environmental Chemical Engineering** 2015; 3:1630-1636.
3. Atul Pradhan, Vidushi Kapoor, **Sanjay Kumar**, Prateek Tandon, Priyanka Kumari. Analytical techniques used for disease diagnosis – invasive and non-invasive tools. **International Journal of Advance Research in Engineering and Technology** 2013; 4:9-27
4. **Sanjay Kumar**, Gopinath R., V. Suneetha. A review on potent biotechnological approach of bacterial alkaline pectinlyase enzyme in industrial sector. **International Journal of Current Research** 2012; 4:091-094.
5. Singhal Ashish, Kumari Shilpa, Raghavendra Raghav Singh, **Kumar Sanjay**, Rajendran N. *Wheat-grass*: an alternative household nutritional food security. **International Research Journal of Pharmacy** 2012; 3:2230- 8407.

International Conferences

1. **Sanjay Kumar**, Ashok K. Srivastava. Scale up of biopolymer production up to 300L bioreactor using *Cupriavidus necator* (DSM 545). **World Biotechnology, Food and Agriculture Conference 2018 at Stockholm, Sweden.**
2. **Sanjay Kumar**, lovely, Ashok K. Srivastava. Scale up of bio/copolymers production using *Cupriavidus necator* (DSM 545). **BioTech 2017 and 7th Czech-Swiss Symposium at Prague, Czech Republic.**

3. **Sanjay Kumar**, A K Srivastava. Scale up of PHB production using *Azohydromonas australica*. **International conference on current trends in biotechnology 2016** at **VIT University Vellore, TN, India**.
4. **Sanjay Kumar**, Kannan Pakshirajan. Biodiesel production potential by *Rhodococcus opacus* PD630 grown using cheaply available industrial wastes. **International Conference on Advance in Biotechnology and Bioinformatics 2013** at **DPU Pune, India**.

National conferences

1. Member of organizing committee in a national conference on a topic entitled as “**CRISPR-Cas as an Emerging Tool for Genome Editing**” held on February 2020 at IMS engineering college, Ghaziabad.
2. Participated in “**Opportunities and Challenges in Fermentation Based Industrial Processes (IAMF-2018)**” at IIIM, Jammu, India.
3. Participated in “**Food security – Issues and challenges 2015**” at the institute of engineers (India), New Delhi.
4. Participated in “**Recent Trends in Plant Physiology & Crop Improvement (ISSP-2010)**” at VIT University, Vellore.

Faculty Development Programs/Workshops Organized

1. A FDP on “**Waste to Biofuels: A Sustainable solution**” was **organized** from 13th to 17th September, 2021 and sponsored by NIT Andhra Pradesh.
2. A Workshop on “**Bioremediation: Photo and electrochemical Bioreactors**” was **organized** from 25th to 29th October 2021 and sponsored by NIT Andhra Pradesh.

FDP /QIP/MOOC courses Attended

1. Participated in Five-day online AICTE sponsored QIP short term course on “**5R’S for sustainable waste management: Fundamentals and Technological Advance**” organized by Department of Chemical engineering & Department of Biotechnology, IIT Roorkee from 22-02-2021 to 26-02-2021.
2. Completed an edX-MOOC course of study entitled as “**The Health effects of climate Change**” offered by HarvardX, an online learning Initiative of Harvard (March 6, 2021).
3. Participated in a Five-day online Faculty Development Program cum Webinar Series on “**Latest Trends and Future Prospects of Biotechnology**” organized by Department of biotechnology, NIT Andhra Pradesh from 06-07-2020 to 10-07-2020.