

# Curriculum Vitae

Name : **Dr Fayaz Ahmad Malla**  
Date of Birth : 05-11-1986  
Gender : Male  
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## Objective:

I am seeking a profession that offers fulfilment and continual learning opportunities, allowing me to apply my knowledge extensively and gain valuable experience. I aim to explore my expertise and contribute optimally to the organization. Presently employed as an Assistant Professor in the Higher Education Department of the Government of Jammu and Kashmir, stationed at Govt. Degree College Pulwama. Previously, I served as a Research Associate in the Water Resources Division at The Energy and Resources Institute (TERI), focusing on water conservation, management, auditing, and enhancing water use efficiency in agriculture.

## Professional Qualifications

- ◆ **2005-2010:** Bachelor's in **Agricultural science** (7.77/10 OGPA) from Sheri Kashmir University of Agriculture Science and Technology – Srinagar.
- ◆ **2010-2012:** Master of Science in **Environmental Sciences** (8.24/10 OGPA) from Division of Environmental Sciences, Indian Agricultural Research Institute, N. Delhi, India – 110012.  
**Thesis Title:** “Microalgae Mediated Remediation of Municipal Wastewater for Agricultural Use”
- ◆ **2012-2016:** PhD in **Environmental Sciences** (7.78/10 OGPA) from Division of Environmental Sciences, Indian Agricultural Research Institute, N. Delhi, India – 110012.  
**Thesis Title:** “Biogas methane enrichment using selective chemical scavengers and microalgae.”

## Papers:

- ◆ GULSHAN K. SHARMA, SHAKEEL A. KHAN, **FAYAZ A. MALLA** and N. GUPTA. “Nutrient sequestration and Phycoremediation of sewage waste water by selective microalgae.” Green Farming July-August, 2014; Vol. 5 (4): 623-626.
- ◆ **F A Malla**, N Gupta, Shakeel A Khan. Biogas Conditioning Using Selective Alkaline Chemicals and Microalgae. Conference Proceedings: International Conference on Life Sciences, Informatics, Food and Environment; August 29- 30, 2014 (Indo Global Journal of Pharmaceutical Sciences, 2014; 4(3): 192).
- ◆ **Fayaz A. Malla**, Shakeel A. Khan, Rashmi, Gulshan K. Sharma, Navindu Gupta, G. Abraham. “Phycoremediation potential of Chlorella minutissima on primary and tertiary treated wastewater for nutrient removal and biodiesel production.” Ecological Engineering ISSN 09258574, 2015; 75:343–349.
- ◆ **Fayaz A. Malla**, Shakeel A. Khan and Navindu Gupta. Application of Alkaline Chemicals for Biogas Methane enrichment. Ecology, Environment and conservation. 2016(2).

- ◆ **Fayaz A. Malla**, Shakeel A. Khan. Phycoremediation study for growth potential of *Chlorella minutissima* on wastewater for biomass and bioenergy production. AGU International Journal of Research in Social Sciences & Humanities. **6** 2018. e-ISSN: 2455-1554; p-ISSN: 2455-6084.
- ◆ Shakeel A. Khan, **Fayaz A. Malla**, Rashmi, Lal Chand Malav, Navindu Gupta, Amit Kumar. Potential of wastewater treating *Chlorella minutissima* for methane enrichment and CO<sub>2</sub> sequestration of biogas and producing lipids. Energy 2018.
- ◆ **Fayaz Ahmad Malla**, Waseem Yaseen, Shakeel A. Khan, N.A. Sofi. Phycoremediation of sewage wastewater by microalgae *Chlorella minutissima* for the irrigation use. Green Farming **6** 2018.
- ◆ Shakeel A. Khan, Gulshan K. Sharma, **Fayaz A. Malla**, Amit Kumar, Rashmi and N. Gupta. Microalgae based biofertilizers: A biorefinery approach to phycoremediate wastewater and harvest biodiesel and manure. Journal of Cleaner Production. 2018
- ◆ Suhaib A. Bandh, **Fayaz A. Malla**, Irteza Qayoom, Haika Mohi-Ud-Din, Aqsa Khursheed Butt, Aashia Altaf, Shahid A. Wani, Richard Betts, Thanh Hai Truong, Nguyen Dang Khoa Pham, Dao Nam Cao and Shams Forruque Ahmed. Importance of Blue Carbon in Mitigating Climate Change and Plastic/Microplastic Pollution and Promoting Circular Economy. Sustainability 2023, 15(3), 2682; <https://doi.org/10.3390/su15032682>
- ◆ Tuan-Dung Hoang, Suhaib A. Bandh, **Fayaz A. Malla**, Irteza Qayoom, Shahnaz Bashir, Suhail Bashir Peer and Anthony Halog. Carbon-Based Synthesized Materials for CO<sub>2</sub> Adsorption and Conversion: Its Potential for Carbon Recycling. Recycling 2023, 8(4), 53; <https://doi.org/10.3390/recycling8040053>
- ◆ Suhaib A Bandh, **Fayaz A Malla**, Tuan-Dung Hoang, Irteza Qayoom, Haika Mohi-Ud-Din, Shahnaz Bashir, Richard Betts, Thanh, Duc Trong Nguyen Le, Nguyen Viet Linh Le, Huu Cuong Le, and Dao Nam Cao. 2024. Track to reach net-zero: Progress and pitfalls. Energy & Environment, 0(0). <https://doi.org/10.1177/0958305X241260793>

## Conferences:

- ◆ Shakeel A. Khan, **F. A. Malla**, N. Gupta, S. Prasad and G. Abraham. “Chlorella mediated phycoremediation of sewage wastewater for the agricultural use presented in 2nd International Conference on Agrochemicals Protecting Crops, Health and Natural Environment – Role of Chemistry for Sustainable Agriculture, held during 15-18 February 2012 in New Delhi.
- ◆ **Fayaz Ahmad Malla**, India water Forum, The Energy and Resources Institute and Ministry of Drinking water and Sanitation Government of India. 28-30 October 2013, New Delhi. (Participation).
- ◆ **Fayaz Ahmad Malla**, International Conference cum Exhibition on India Farm 2 Fork. PHD chamber of commerce and industry, 29-30 November 2013, PHD house New Delhi. (Participation).
- ◆ **Fayaz Ahmad Malla**. Microalgae mediated remediation of municipal wastewater for agricultural use, “International Water Convention” Water for Sustainability: Towards Development and Prosperity, 3<sup>rd</sup> India water forum 2016, 20-22 April, The Energy and Resources Institute New Delhi.

- ◆ **Fayaz Ahmad Malla**, Navindu Gupta. Chemical Scavengers and microalgae mediated methane enrichment in Biogas. National Seminar on National Development through Science and Technology, University of Kashmir, organised by Indian Science congress association on 25-26 September 2017.
- ◆ **Fayaz A. Malla**, Shakeel A. Khan. Phycoremediation study for growth potential of *Chlorella minutissima* on wastewater for biomass and bioenergy production. 1<sup>st</sup> International Conference on Recent Developments in Science, Humanities & Management-2018.
- ◆ Gulshan Sharma, Shakeel Khan, **Fayaz Malla**, Navindu Gupta. Microalgae from wastewater treatment to bio-fertilizers – A climate resilient technology of waste valorization. XIV Agricultural Science Congress, 20-23 February 2019, NASC, Pusa, New Delhi, India.
- ◆ Navindu Gupta, **Fayaz Ahmad Malla**, Shakeel Ahmed Khan, Sandeep Kumar. Upgradation of biogas using selective chemical scavengers. XIV Agricultural Science Congress, 20-23 February 2019, NASC, Pusa, New Delhi, India.
- ◆ Participated online in International Web Conference on Science, Engineering & Technology (IWCSET-2020) organised by Society for Technology Advanced Materials of India (STAMI) on May 15-16, 2020.
- ◆ Attended as Special invite in On day National conference on “Bridging the Gap Between Science and Arts at Government Degree College D.H Pora Kulgam on 3<sup>rd</sup> August 2023.
- ◆ Participated in seminar on Technical Terminology in Social Science organised by Commission for Scientific and Technical Terminology at Government Degree College Tral Kashmir from 4<sup>th</sup> to 5<sup>th</sup> March 2024.

## **BOOKS PUBLISHED:**

- ◆ Biofuels in Environmental Sustainability by Khalid Rehman Hakeem, Suhaib A. Bandh, **Fayaz A. Malla** and Mohammad Aneesul Mehmood. Elsevier 2022.
- ◆ Valorization of Microalgal Biomass and Wastewater Treatment by Suhaib A. Bandh and **Fayaz A. Malla**. Elsevier 2022
- ◆ Biofuels in Circular Economy by Suhaib A. Bandh and **Fayaz A. Malla**. Springer Nature Singapore 2022
- ◆ Waste Management in the Circular Economy by Suhaib A. Bandh and **Fayaz A. Malla**. Springer Nature Singapore. 2023
- ◆ Renewable Energy in Circular Economy by Suhaib A. Bandh and **Fayaz A. Malla**. Springer Nature Singapore. 2023
- ◆ Water Footprints and Sustainable Development by Suhaib A. Bandh and **Fayaz A. Malla**. Elsevier (In press)
- ◆ Water Use Efficiency, Sustainability and Circular Economy by Suhaib Bandh, **Fayaz A Malla**, Anthony Halog. Elsevier (In press)
- ◆ Algal Biorefineries in Circular Economy for Climate Change Resilience by Suhaib Bandh, **Fayaz A Malla**, Anthony Halog. Tylor and Francis (CRC Press (In press)

## BOOK CHAPTERS

- ◆ **Fayaz A. Malla**, Aiman Mushtaq, Suhaib A. Bandh, and Irtiza Qayoom, Understanding Climate Change: Scientific Opinion and Public Perspective. Springer Nature Switzerland AG 2022, S. A. Bandh (ed.), Climate Change, [https://doi.org/10.1007/978-3-030-86290-9\\_1](https://doi.org/10.1007/978-3-030-86290-9_1)
- ◆ Gulshan Kumar Sharma, Shakeel Ahmad Khan, Amit Kumar, Ittyamkandath Rashmi, **Fayaz Ahmad Malla** and Gopal Lal Meena, Algal Biorefinery: A Synergetic Sustainable Solution to Wastewater Treatment and Biofuel Production. Intechopen 2022., Dr. Leila Queiroz Zepka, Dr. Eduardo Jacob-Lopes and Dr. Mariany Costa Deprá. Microalgae, <https://DOI: 10.5772/intechopen.104762>
- ◆ **Fayaz A. Malla**, Nazir Ahmad Sofi, Navindu Gupta and Suhaib A. Bandh, Valorization of microalgae for biogas methane enhancement. Valorisation of Microalgal Biomass and Wastewater Treatment. Elsevier 2022, Editors: Suhaib Bandh, Fayaz Malla. Valorisation of Microalgal Biomass and Wastewater Treatment, ISBN: 9780323918695, DOI: <https://doi.org/10.1016/B978-0-323-91869-5.00015-6>
- ◆ **Fayaz A. Malla**, and Suhaib A. Bandh, Aquatic Microalgal Biofuel Production. Elsevier 2022, Editors: Suhaib Bandh, Fayaz Malla. Valorisation of Microalgal Biomass and Wastewater Treatment, ISBN: 9780323918695 DOI: <https://doi.org/10.1016/B978-0-323-91869-5.00009-0>
- ◆ **Fayaz A. Malla**, and Suhaib A. Bandh, Biofuels and sustainable development goals, Elsevier 2022, Editors: Khalid Hakeem, Suhaib Bandh, Fayaz Malla, Mohammad Mehmood. Environmental Sustainability of Biofuels, ISBN: 9780323911597, DOI: <https://www.elsevier.com/books/environmental-sustainability-of-biofuels/hakeem/978-0-323-91159-7>
- ◆ **Fayaz A. Malla**, Suhaib A. Bandh, Shahid A. Wani, Anh Tuan Hoang & Nazir Ahmad Sofi, Biofuels: Potential Alternatives to Fossil Fuels, Springer 2023, Editors: Suhaib A. Bandh, Fayaz A. Malla, ISBN: 978-981-19-5837-3, DOI: [https://doi.org/10.1007/978-981-19-5837-3\\_1](https://doi.org/10.1007/978-981-19-5837-3_1)
- ◆ Tuan-Dung Hoang, Pham Thi Ha, Anthony B. Halog, **Fayaz A. Malla** & Suhaib A. Bandh, Biofuel Projects and Current Environmental Policies: Vietnam's Case and Neighboring Asian Countries, Springer 2023, Editors: Suhaib A. Bandh, Fayaz A. Malla, ISBN: 978-981-19-5837-3, DOI: [https://doi.org/10.1007/978-981-19-5837-3\\_5](https://doi.org/10.1007/978-981-19-5837-3_5)
- ◆ **Fayaz Ahmad Malla**, Tuan Dung, Suhaib A. Bandh, Afaan Ahmad Malla & Shahid A. Wani, Circular Economy to Decarbonize Electricity, Springer 2023, Editors: Suhaib A. Bandh, Fayaz A. Malla and Anh Tuan Hoang, Renewable Energy in Circular Economy, ISBN: 978-3-031-42219-5, DOI: <https://doi.org/10.1007/978-3-031-42220-1>
- ◆ Suhaib A. Bandh, **Fayaz A. Malla**, Shahid A. Wani & Anh Tuan Hoang, Waste Management and Circular Economy, In: Bandh, S.A., Malla, F.A. (eds) Waste Management in the Circular Economy. Springer, Cham. [https://doi.org/10.1007/978-3-031-42426-7\\_1](https://doi.org/10.1007/978-3-031-42426-7_1)
- ◆ **Fayaz A. Malla**, Mukhtar Ahmed, Afaan A. Malla, Suhaib A. Bandh, Nazir A. Sofi, Waste Management in Past Present and Future, [Editors: Pankaj Kumar Gupta, CRC Press 2023 \(in press\)](#)
- ◆ **Fayaz A. Malla**, Afaan A. Malla, Suhaib A. Bandh, Nazir A. Sofi, Mukhtar Ahmed, The Role of Brown Algae in Global Warming Mitigation, Editors: Tonni Agustiono Kurniawan, Abdelkader Anouzla, Algae as a Natural Solution for Challenges in Water-Food-Energy Nexus Toward Carbon Neutrality Springer Singapore 2024 (*in press*)
- ◆ **Fayaz A. Malla**, Sonia Grover, Afaan A. Malla, Green Infrastructure for Stormwater Management, Editor: Saeid Eslamian, Encyclopedia of Green and Smart City, EGSC, Springer 2024 (*in press*)
- ◆ Sonia Grover, Richa Sharma, **Fayaz A. Malla**, Nature-Based Solutions for Water Resilience, Editor: Saeid Eslamian, Encyclopedia of Green and Smart City, EGSC, Springer 2024 (*in press*)
- ◆ **Fayaz A. Malla**, Afaan A. Malla, Javaid A. Tali, Saeid Eslamian, Drought Impact on Urban Green Space, Editor: Saeid Eslamian, Encyclopedia of Green and Smart City, EGSC, Springer 2024 (*in press*)

- ◆ **Fayaz A. Malla**, Sonia Grover, Afzal Hussain, Mohamed F. Alajmi, Waseem A. Wani and Afaan A. Malla, Nazir A. Sofi, and Foozia Majeed, Water Footprints in Power Generation: Challenges and Strategies for a Sustainable Environment, Editors: Suhaib A. Bandh, Fayaz A. Malla, Water Footprints and Sustainable Development, Elsevier 2024 (*in press*)
- ◆ **Fayaz A. Malla**, Mir Tamana, Farhana Rahman, Afaan A. Malla, Suhaib A. Bandh, Nazir A. Sofi, Mukhtar Ahmed and Showkat Rashid, Strategies for the Reduction of Water Footprints, Editors: Suhaib A. Bandh, Fayaz A. Malla, Water Footprints and Sustainable Development, Elsevier 2024 (*in press*)
- ◆ **Fayaz A Malla**, Afaan A. Malla, Showkat Rashid, Nazir A. Sofi and Mukhtar Ahmed. Understanding Biodiesel: From Feedstock to Fuel. 2024. IntechOpen (*in press*)
- ◆ **Fayaz A. Malla**, Afaan A. Malla. Microalgae-Based Systems for Bioremediation of Conventional Pollutants.2024. Elsevier. (*in press*)

## Popular Articles

- ◆ **Fayaz Ahmad Malla**, Environmental informatics and its Application, Biotech Articles. 05-07-2015 <http://www.biotecharticles.com/Bioinformatics-Article/Environmental-Informatics-and-its-Applications-3381.html>
- ◆ **Fayaz Ahmad Malla**, Navindu Gupta, Shakeel A. Khan Lal Chand Malav, , Sandeep Kumar, Mahesh Kumar Malav. Microbial Metal Bioaccumulation. Biotech Articles, 07-05-2015 <http://www.biotecharticles.com/Biotech-Research-Article/Microbial-Metal-Bioaccumulation-PDF-3382.html>
- ◆ **Fayaz Ahmad Malla**, Smart Water, Green Challenges: The Present Day Need. TERRAGREEN MAY 2016, 34-36.
- ◆ Sonia Grover, **Fayaz Ahmad Malla**, Tapping water management. Financial express 23 march 2016.
- ◆ **Fayaz Ahmad Malla**, Sonia Grover, Delhi's looming water crisis; can we afford to do nothing? The Quint, 28 May 2016.
- ◆ **Fayaz Ahmad Malla**, Sonia Grover, Harvest rainwater to cure Delhi's water woes, Financial express, 02 September 2016.
- ◆ Sonia Grover, **Fayaz Ahmad Malla**. Not a clean sweep solution for sanitation. Hindustan times, 10 Sept 2016.
- ◆ Sonia Grover and Fayaz Ahmad Malla, Reviving traditional water bodies is essential for smart cities, 31 March 2017 <http://www.dailyo.in/politics/smart-cities-water-bodies-rural-india-flood-prevention/story/1/16467.html>
- ◆ Sonia Grover and Fayaz Ahmad Malla, Set up wetlands to cure wastewater, 21April 2017 <http://m.deccanherald.com/articles.php?name=http%3A%2F%2Fwww.deccanherald.com%2Fcontent%2F607377%2Fset-up-wetlands-cure-wastewater.html>

## Television Talks and Reviews

- ◆ Had a television talk on climate change on DD Kashir on 3<sup>rd</sup> January 2019. [https://youtu.be/N\\_ojVdWRep0](https://youtu.be/N_ojVdWRep0)
- ◆ Acting as a reviewer for the journal of cleaner production and journal of science of the total environment.

## Trainings

- ◆ Off-Campus outreach Certificate program on “**Remote sensing, Geographical Information system and global positioning system**” by Indian Institute of Remote Sensing from 1<sup>st</sup> August to 8<sup>th</sup> November 2011.
- ◆ Off-Campus outreach Certificate program on “**Hyperspectral Remote Sensing**” by Indian Institute of Remote Sensing from 13<sup>th</sup> February to 30<sup>th</sup> March 2012.
- ◆ Attended 77<sup>th</sup> **General orientation course** at UGC-HRDC of University of Kashmir from 26<sup>th</sup> December 2017 to 23<sup>rd</sup> January 2018.
- ◆ Attended **National workshop on Remote Sensing and GIS for Natural Resources and Environment Management** in Sri Pratap College Srinagar during 23<sup>rd</sup> -24<sup>th</sup> March 2018.
- ◆ Attended workshop cum training on **All India Survey of Higher Education** in University of Kashmir on 14<sup>th</sup> March 2018.
- ◆ Attended two weeks Faculty development programme on **Innovations in Teaching** in Sri Pratap College from 5<sup>th</sup> – 18<sup>th</sup> January 2019.
- ◆ Attended two weeks **Refresher Course in Science** at UGC-HRDC of University of Kashmir from 16<sup>th</sup> – 30<sup>th</sup> December 2019.
- ◆ Attended two weeks faculty development workshop on **Information Communication Technology and Modern Education: The way forward (ICTME-2020)** at Govt. Sri Pratap memorial Rajput college of commerce Jammu from 2<sup>nd</sup> -17<sup>th</sup> March 2020.
- ◆ Attended Five days Faculty Development Program on “**Pedagogy of Scientific Writing, Reporting and Scholarly Networks**” organised by Feroze Gandhi Institute of Engineering and Technology, Raebareli from June 19-23, 2020.
- ◆ Attended online five days FDP on **National Level One Week Online Faculty Development Program on “MOODLE: Learning Management System”** organized by Central Library, Govt. Degree College Tangmarg in association with Spoken Tutorial Project, IIT Bombay from 20th June to 24th June 2020.
- ◆ Attended Seven days online training program on “**Using ICT toll for recording online Lectures**” organised by SKUAST-Kashmir from 24<sup>th</sup> to 30<sup>th</sup> August 2020.
- ◆ Attended one week National e-workshop on “**Leveraging Education for Harnessing Entrepreneurship, Research & Innovation**” (LEHERI-2020) organised by Higher Education Department, Govt. of Union Territory of Jammu and Kashmir from September 7-12, 2020.
- ◆ Attended two-week refresher course on “**Managing Online Classes &Co-creating Moocs 28.0**” from Teaching learning Center, Ramanujan College, University of Delhi from 6<sup>th</sup> to 20<sup>th</sup> July 2023.

## Awards/Fellowship

- ◆ Received prestigious National Junior Research Fellowship from Indian Council of Agricultural Research for perusing the M.Sc. at Division of Environmental Sciences, IARI New Delhi.
- ◆ Received prestigious PhD fellowship from Indian Agricultural Research Institute for perusing the PhD at Division of Environmental Sciences, IARI New Delhi.
- ◆ Qualified UGC NET on 12/11/2012 in Environmental Sciences (17890522)

## Work Experience

- ◆ Has worked as a team member in Uttarakhand rural water and sanitation project, World Bank sponsored in 2015
- ◆ Has worked as team member in underground taming of rainwater irrigation water, International water management institute (IWMI) sponsored project 2015-2016
- ◆ Has worked as team member in Water Audit for ITC Chirala project 2015
- ◆ Has worked in Water footprints project NITI sponsored as an agriculture expert.
- ◆ Currently Has worked as Co-PI in centre for water use efficiency project, a project in collaboration with JISL

## **Laboratory Skills**

### ***Instrument Handled:***

- ◆ Spectrophotometers, AAS, Conductivity meter, Centrifuge, pH meter, TDS meter, Moisture meter, BOD Incubator, Autoclave, Laminar Air Flow, Turbidity meter, Gas Liquid Chromatography (GLC) and other modern equipments.

### ***Techniques Known:***

- ◆ Physico-chemical testing related to Water & Waste water (pH, TDS, Alkanity, Hardness, Conductivity, DO, BOD).
- ◆ Culturing and preservation of microalgae
- ◆ Isolation and identification of microalgae from different sources
- ◆ Identification of liquid sample (by using GLC at different Temp)

## **Declaration**

I hereby declare that the facts given in this resume are correct to the best of my knowledge.

Place: Srinagar

(FAYAZ AHMAD MALLA)