



## Tirtha Raj Acharya (Ph.D.)

**Date of birth:** 14 Nov 1993 | **Place of birth:** Nottingham | **Nationality:** Nepalese |

**Gender:** Male | **Phone number:** (+44) 7470822534 (Mobile) | **Email address:**

[tirtharajacharya2050@gmail.com](mailto:tirtharajacharya2050@gmail.com) | **LinkedIn:**

<https://www.linkedin.com/in/tirtha-raj-acharya-ph-d-5605771a6/> |

**Address:** NG7 3BN, Nottingham, England, UK, NG7 3BN, Nottingham, United Kingdom (Home)

### ABOUT ME

I am a Research Fellow at the University of Nottingham, UK, specializing in chemical reactions using cold plasma. My current research focuses on advancing sustainable and clean approaches for nitrogen fixation and CO<sub>2</sub> conversion with non-thermal plasma, using catalysts to drive innovative solutions. I hold a Ph.D. from Kwangwoon University, Seoul, South Korea, where I specialized in non-thermal plasma physics. My doctoral research covered plasma diagnostics, plasma-material interactions, and environmental applications. With a solid foundation in both experimental and applied plasma science, I am dedicated to pioneering research that bridges fundamental plasma physics with impactful technological advancements.

### WORK EXPERIENCE

26 AUG 2024 – CURRENT Nottingham, United Kingdom

#### RESEARCH FELLOW IN CHEMICAL REACTIONS USING COLD PLASMA UNIVERSITY OF NOTTINGHAM

1. Conducted advanced research in chemical reactions leveraging cold plasma technology, contributing to cutting-edge developments in the field.
2. Designed, executed, and analyzed experiments to explore innovative applications of cold plasma in chemistry.
3. Collaborated with multidisciplinary teams to publish findings in peer-reviewed journals and present at conferences.
4. Maintained compliance with institutional policies on research ethics, confidentiality, and data protection.
5. Managed laboratory operations, including procurement, safety compliance, and mentoring junior researchers.

**Address** 6 Triumph Rd, Lenton, Nottingham NG7 2GT, NG7 2GT, Nottingham, United Kingdom

1 AUG 2023 – 31 JUL 2024 Seoul, South Korea

#### TEACHING ASSISTANCE

To assist undergraduate students from various Departments of Science and Engineering at Kwangwoon University, Seoul, in their laboratory activities, while simultaneously engaging them in the "Kwangwoon VIP class" to inspire and familiarize them with the applications of non-thermal plasma in diverse fields such as nanoparticle synthesis, the semiconductor industry, and environmental solutions.

**Address** 20 Gwangun-ro, Nowon-gu, Seoul, South Korea, 01887, Seoul, South Korea

1 AUG 2023 – 31 JUL 2024 Seoul, South Korea

#### RESEARCH ASSISTANCE KWANGWOON UNIVERSITY

To support undergraduate students enrolled in the Department of Electrical and Biological Physics at Kwangwoon University, Seoul, in their electronics experiments, particularly in fundamental circuit design aimed at voltage amplification crucial for the design of non-thermal plasma generation.

**Address** 20 Gwangun-ro, Nowon-gu, Seoul, South Korea, Seoul, South Korea

● **EDUCATION AND TRAINING**

2 MAR 2021 – 15 JUN 2024 Seoul, South Korea  
**PH.D.** Kwangwoon University

**Website** <https://www.kw.ac.kr/> | **Field of study** Plasma Physics | **Final grade** 4.46/4.50 |

**Thesis** Non-thermal atmospheric pressure plasma's potential for environmental remediation and its role in metallic nanoparticles synthesis

1 MAY 2016 – 30 DEC 2019 Kathmandu, Nepal  
**MASTER DEGREE** Tribhuvan University

**Website** <https://tu.edu.np/> | **Field of study** Physics | **Final grade** 3.62/4.00 |

**Thesis** Study on the Synthesis of ZnO Nanoparticles Using Azadirachta indica Extracts for the Fabrication of a Gas Sensor

1 NOV 2011 – 1 AUG 2015 Kathmandu, Nepal  
**BACHELOR DEGREE** Tribhuvan University

**Website** <https://tu.edu.np/>

● **LANGUAGE SKILLS**

Mother tongue(s): **NEPALI**  
Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
<b>ENGLISH</b>	C2	C2	C2	C2	C2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● **RESEARCH INTEREST**

**Non-thermal Plasma Physics**

- 1. Plasma physics; non-thermal plasma;
- 2. Plasma diagnosis and its applications
- 3. Plasma-liquid interactions
- 4. Plasma-material interactions
- 5. Plasma-based synthesis of metal nanoparticles/nanocomposite; Au; Ag; MnO<sub>2</sub>; ZnO
- 6. Thin film deposition and its applications
- 7. Functional polymer nanocomposites development
- 8. Plasma catalysis
- 9. Plasma-assisted waste water treatment
- 10. Plasma-driven TPH contaminated soil remediation
- 11. Plasma-driven environmental cleanup
- 12. Plasma-assisted nitrogen fixation
- 13. Plasma-based agriculture
- 14. Optical and gas sensors

● **DIGITAL SKILLS**

Microsoft Office package: Microsoft Word, Excel, PowerPoint, Access | Matlab/Simulink | Python Language - Basic knowledge | data processing and analysis software: Origin (advanced)

● **INSTRUMENTATION SKILLS**

**Instruments and Instrumentations**

- 1. X-ray Diffraction (XRD)
- 2. Scanning Electron Microscopy (SEM)
- 3. Transmission Electron Microscopy (TEM)
- 4. Gas Chromatography Flame Ionization Detector (GC-FID)

5. Liquid Chromatography Mass Spectrometry (LC-MS)
6. Raman Spectroscopy
7. Water Contact Angle (WCA)
8. Circular Dichroism (CD)
9. Solid, Liquid and Gas Fourier Transform Spectroscopy (FTIR)
10. X-ray photoelectron spectroscopy (XPS)
11. Optical Emission Spectroscopy (OES)
12. Microplate Reader
13. Zeta Potential
14. Dynamic Light Scattering (DLS)
15. Thermogravimetric Analysis (TGA)
16. Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES)

## ● HONOURS AND AWARDS

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4 AUG 2018

### **The Masters Research support – University Grant Commission (UGC)**

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The University Grant Commission (UGC) Masters Research support for the research work entitled “Study on the Synthesis of ZnO Nanoparticles Using *Azadirachta indica* Extracts for the Fabrication of a Gas Sensor” on 4th August 2018 at University Grants Commission, Sanathimi, Bhaktapur, Nepal.

Link [https://www.ugcnepal.edu.np/uploads/notice/Masters\\_Research\\_Support\\_2074\\_75.pdf](https://www.ugcnepal.edu.np/uploads/notice/Masters_Research_Support_2074_75.pdf)

16 MAY 2022

### **Best Student Poster Presentation Award – Korean Vacuum Society (KVS)**

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Best student poster presentation award for the poster entitled “Plasma Synthesis of Silver Nanoparticles and their Anti-bacterial Effects” at the 62<sup>nd</sup> Korean Vacuum Engineering Society Winter Symposium in 2022, 16-18 February 2022, Gangwon-do, Korea.

Link <https://www.kvs.or.kr/board/list.html?num=1225&start=50&code=notice>

5 MAY 2022

### **Best Presentation Award – Department of Physics, Ch. Charan Singh University, Meerut, India and Kwangwoon University**

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Best presentation Award entitled “ZnO thin film synthesis for gas sensing applications and their application in plasma bioscience” in the Indo-Korea International Workshop/Technical Virtual Training Jointly organized by the Department of Physics, Ch. Charan Singh University, Meerut, India and Plasma Bioscience Research Centre, Kwangwoon University, Seoul, South Korea on Nanoparticle-Based Plasma Bioscience, 04-05 May 2022.

Link [https://drive.google.com/file/d/1GgLnd054EUewxlkN-QqE-\\_i440RjldCk/view?usp=drive\\_link](https://drive.google.com/file/d/1GgLnd054EUewxlkN-QqE-_i440RjldCk/view?usp=drive_link)

19 DEC 2023

### **Best Student Poster Presentation Award – Korean Vacuum Society (KVS)**

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Best student poster presentation award for the poster entitled “Assessing the effectiveness of multi-electrode DBD plasma for degrading Methylene blue and Congo red dyes” at the 65th Summer Annual Conference of The Korean Vacuum Society and IFFM 2023, 20-23 August, Jeju, Korea.

Link <https://www.kvs.or.kr/board/list.html?num=1376&code=notice>

## ● PUBLICATIONS

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2024

### **[Examining plasma-generated ozone and nitric oxide's role in synthetic textile dye water remediation and ecotoxicological analysis](#)**

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**Tirtha Raj Acharya**, Prajwal Lamichhane, Manorma Negi, Kirubel Amsalu, Oat Bahadur Dhakal, Roshani Dahal, Neha Kaushik, Nagendra Kumar Kaushik, and Eun Ha Choi

**Journal of Environmental Management: (I.F. 8.0)**

### **[The potential of multicylindrical dielectric barrier discharge plasma for diesel-contaminated soil remediation and biocompatibility assessment](#)**

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**Tirtha Raj Acharya**, Prajwal Lamichhane, Apurva Jaiswal, Kirubel Amsalu, Young June Hong, Neha Kaushik, Nagendra Kumar Kaushik, and Eun Ha Choi.

**Environmental Research: (I.F: 8.3)**

### [Evaluation of degradation efficacy and toxicity mitigation for 4-nitrophenol using argon and air-mixed argon plasma jets](#)

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**Tirtha Raj Acharya**, Prajwal Lamichhane, Apurva Jaiswal, Neha Kaushik Nagendra Kaushik, Eun Ha Choi  
**Chemosphere: (I.F. 8.8)**

### [Influences of plasma plume length on structural, optical, and dye degradation properties of citrate-stabilized silver nanoparticles synthesized by plasma-assisted reduction](#)

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**Tirtha Raj Acharya**, Geon Joon Lee, and Eun Ha Choi.  
**Nanomaterial: (I.F. 5.3)**

2024

### [Impact of Aluminum doping on the enhanced ethanol gas sensing characteristics of ZnO thin film](#)

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**Tirtha Raj Acharya**, Dinesh Kumar Chaudhary, Prajwal Lamichhane, Surya Kumari Joshi, Sandhya Gautam, Neha Kaushik, Abdulaziz A. Al-Khedhairy, Rizwan Wahab, Madhur Babu Singh, Prashant Singh, Eun Ha Choi, and Nagendra Kumar Kaushik.  
**Ceramics International: (I.F. 5.2)**

### [Influence of nanoparticle size on the characterization of ZnO thin films for formaldehyde sensing at room temperature](#)

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**Tirtha Raj Acharya**, Dinesh Kumar Chaudhary, Sandhya Gautam, Amrendra Kumar Singh, Rajesh Shrestha, Bishwa Chandra Adhikari, Prajwal Lamichhane, Bhupal Paudyal, Nagendra Kumar Kaushik, Eun Ha Choi  
**Sensor and Actuators A: Physical : (I.F. 4.6)**

### [Study on the synthesis of ZnO nanoparticles using Azadirachta indica extracts for the fabrication of a gas sensor](#)

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**Tirtha Raj Acharya**, Pradeep Lamichhane, Rizwan Wahab, Dinesh Kumar Chaudhary, Bhanu Shrestha, Leela Pradhan Joshi, Nagendra Kumar Kaushik, and Eun Ha Choi.  
**Molecules: (I.F: 4.6)**

### [Wide-range ethanol sensor based on a spray-deposited nanostructured ZnO and Sn-doped ZnO films](#)

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**Tirtha Raj Acharya (joint first author)**, Dinesh Kumar Chaudhary, Rajesh Shrestha, Sandhya Gautam, Pitamber Shrestha, Agni Dhakal, Shankar Prasad Shrestha, Abdulaziz A. Al-Khedhairy, Rizwan Wahab, Nagendra Kumar Kaushik, Eun Ha Choi, Leela Pradhan Joshi  
**Sensor and Actuators A: Physical: (I.F: 4.6)**

### [A comprehensive study on the synthesis, characteristics, and catalytic applications of submerged hydrogen-mixed argon plasma-synthesized silver nanoparticles](#)

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**Tirtha Raj Acharya**, Minji Jang, Geon Joon Lee, Eun Ha Choi  
**Current Applied Physics: Physical: (I.F. 2.4)**

2025

### [Insights Into Nitrogen Adsorption and Dinitrogen Dissociation on CnP Clusters: A First-Principles Density Functional Theory Study](#)

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**Tirtha Raj Acharya**, Nirajan Pant, Prajwal Lamichhane, Prabesh Adhikari, Sandhya Gautam, Neha Kaushik, Vinaya Kumar Jha, Eun Ha Choi, Nagendra Kumar Kaushik  
**ChemistrySelect: (I.F. 1.9)**

### [Plasma-driven green synthesis of chitosan-functionalized gold nanoparticles for enhanced immunogenicity](#)

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**Tirtha Raj Acharya**, Manorma Negi, Paritosh Patel, Prajwal Lamichhane, Taewan Kim, Eunbi Shim, Sandhya Gautam, Linh Nhat Nguyen, Neha Kaushik, Eun Ha Choi, Nagendra Kumar Kaushik **Advanced Composites and Hybrid Materials: I.F. 20.1 (Submitted)**

## Enhanced ammonia sensing performance of zinc oxide thin films through non-thermal plasma surface modification

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**Tirtha Raj Acharya**, Rajesh Shrestha, Prajwal Lamichhane, Roshan Chalise, Sandhya Gautam, Dinesh Kumar Chaudhary (**Preparing**)

2024

### [Abatement and biotoxicity assessment of chlorpyrifos residue from green coffee beans: Effect of non-thermal plasma generated ozone and nitric oxide species](#)

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Kirubel Amsalu, **Tirtha Raj Acharya**, Apurva Jaiswal, Prajwal Lamichhane, Rakeb Kifle, Neha Kaushik, Jun Sup Lim, Chung Tae Kim, Nagendra Kumar Kaushik, and Eun Ha Choi

**Chemical Engineering Journal: (I.F. 15.1)**

### [Plasma-generated nitric oxide water: A promising strategy to combat bacterial dormancy \(VBNC state\) in environmental contaminant \*Micrococcus luteus\*](#)

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Shweta B. Borkar, Manorma Negi, Apurva Jaiswal, **Tirtha Raj Acharya**, Neha Kaushik, Eun Ha Choi, and Nagendra Kumar Kaushik.

**Journal of Hazardous Material: (I.F. 13.6)**

### [Non-thermal argon plasma jets of various lengths for selective reactive oxygen and nitrogen species production](#)

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Pradeep Lamichhane, **Tirtha Raj Acharya**, Neha Kaushik, Linh N. Nguyen, Jun Sup Lim, Volker Hessel, Nagendra Kumar Kaushik, and Eun Ha Choi.

**Journal of Environmental Chemical Engineering: (I.F. 7.7)**

### [Surface air gas discharge plasma: An ecofriendly virus inactivation approach to enhance CPRRs mediated antiviral genes expression against airborne bio-contaminant \(human coronavirus-229E\)](#)

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Paritosh Patel, Neha Kaushik, **Tirtha Raj Acharya**, Eun Ha Choi, and Nagendra Kumar Kaushik.

**Environmental Pollution: (I.F. 8.9)**

### [Mitigation of T3SS-Mediated virulence in waterborne pathogenic Bacteria by multi-electrode Cylindrical-DBD plasma-generated nitric oxide water](#)

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Shweta B. Borkar, Manorma Negi, **Tirtha Raj Acharya**, Prajwal Lamichhane, Neha Kaushik, Eun Ha Choi, and Nagendra Kumar Kaushik.

**Chemosphere: (I.F. 8.8)**

### [Surface activation of thin polyvinyl alcohol films by atmospheric pressure plasma jet: Influence of electron temperature](#)

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Prajwal Lamichhane, **Tirtha Raj Acharya**, JaeWoo Park, Kirubel Amsalu, Byoungchoo Park, and Eun Ha Choi.

**Plasma Process and Polymer: (I.F. 3.5)**

### [Pencil-on-paper flexible DBD plasma for surface sterilization](#)

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Neha Kaushik, Nguyen Thuan Dao, Minh Thu Nguyen, Shweta B. Borkar, Hoang Tung Nguyen, Le Thi Quynh Xuan, **Tirtha Raj Acharya**, Nguyen Thanh Tung, Eun Ha Choi, Nagendra Kumar Kaushik, Linh Nhat Nguyen

**Materials Advances (I.F. 5.0)**

### [Effects of spark dielectric barrier discharge plasma on water sterilization and seed germination](#)

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Oat Bahadur Dhakal, Roshani Dahal, **Tirtha Raj Acharya**, Prajwal Lamichhane, Sandhya Gautam, Bhupendra Lama, Nagendra Kumar Kaushik, Eun Ha Choi, and Roshan Chalise.

**Current Applied Physics: 2023 (I.F. 2.4)**

### [Antimicrobial efficacy of direct air gas soft jet plasma for oral bacterial biofilm eradication and treatment](#)

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Valentina Puca, Beatrice Marinacci, Morena Pinti, Federica Di Cintio, Bruna Sinjari, Maria Carmela Di Marcantonio, Gabriella Mincione, **Tirtha Raj Acharya**, Nagendra Kumar Kaushik, Eun Ha Choi, Michele Sallese, Simone Guarnieri, Rossella Grande, Vittoria Perrotti

**Scientific Reports: (I.F. 4.6)**

## [Modulation of Programmed Death-Ligand 1 \(PD-L1\) Expression to Augment Sensitivity to Atezolizumab in Breast Cancer Cells through Non-thermal Air Gas Plasma](#)

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Shweta B. Borkar, Paritosh Patel, Manorma Negi, **Tirtha Raj Acharya**, Neha Kaushik, Eun Ha Choi, Nagendra Kumar Kaushik

**Plasma Processes and Polymers: (I.F. 3.5)**

2024

## [Cold atmospheric plasma activated media selectively affects human head and neck cancer cell lines](#)

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Giacomo Vd, M Balaha, M Pinti, MCD Marcantonio, I Cela, **Tirtha Raj Acharya**, NK Kaushik, EH Choi, M Rapino, M Mazzone, G Mincione, G Sala, M Perrucci, M Locatelli, V Perrotti.

**Oral Diseases: (I.F. 3.8)**

## **Plasma-assisted synthesis of bifunctional MnO<sub>2</sub>-Au nanohybrids for synergistic bimodal plasma starvation therapy**

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Linh Nhat Nguyena, Neha Kaushik, Apurva Jaiswal, **Tirtha Raj Acharya**, Thu Minh Nguyen, Tung Thanh Nguyen, Eun Ha Choi, Nagendra Kumar Kaushik (**Submitted**)

**ACS Nano: (I.F. 17.1)**

2025

## [Reduction of microbial load in soil by gas generated using non-thermal atmospheric pressure plasma](#)

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Wirinthip Ketya, Nan-Nan Yu, **Tirtha Raj Acharya**, Eun Ha Choi, Gyungsoon Park

**Journal of Hazardous Materials: (I.F. 13.6)**

2024

## [Antiaging in a Bottle: Bioactive Competency of Plasma-Generated Nitric Oxide Water for Modulation of Aging-Related Signature in Human Dermal Cells](#)

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Apurva Jaiswal, Neha Kaushik, **Tirtha Raj Acharya**, Han Sup Uhm, Eun Ha Choi, Nagendra Kumar Kaushik  
ACS Applied Materials & Interfaces

**ACS Applied Materials & Interfaces: (I.F. 9.5)**

2024

## [Enhanced dye degradation using plasma bubbles for the sustainable environmental remediation](#)

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Prajwal Lamichhane, **Tirtha Raj Acharya**, Manorma Negi, Roshani Dahal, Oat Bahadur Dhakal, Neha Kaushik, Nagendra Kumar Kaushik, and Eun Ha Choi

**Chemosphere: (I.F. 8.8)**

2024

## [Gas phase formaldehyde degradation: Continuous versus duty cycle driven plasma reactor](#)

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Oat Bahadur Dhakal, Roshni Dahal, Prajwal Lamichhane, **Tirtha Raj Acharya**, Eun Ha Choi

**Process Safety and Environmental Protection: (I.F. 7.8)**

2024

## [Investigating the impact of plasma plume length of atmospheric pressure plasma jet on ampicillin degradation efficiency and toxicity](#)

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Prajwal Lamichhane, **Tirtha Raj Acharya**, Apurva Jaiswal, Kirubel Amsalu Admasu, Neha Kaushik, Nagendra Kumar Kaushik, and Eun Ha Choi

**Journal of Environmental Chemical Engineering: (I.F. 7.7)**

2024

## [Investigating plasma activated water as a sustainable treatment for improving growth and nutrient uptake in maize and pea plant](#)

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Roshani Dahal, Oat Bahadur Dhakal, **Tirtha Raj Acharya**, Prajwal Lamichhane, Sandhya Gautam, Roshan Chalise, Neha Kaushik, Eun Ha Choi, and Nagendra Kumar Kaushik

**Plant Physiology and Biochemistry: (I.F. 6.5)**

2024

[Dibutyl phthalate degradation and toxicity assessment based on hydroxyl radicals generated by plasma jet](#)

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Kirubel Amsalu, Juie Nahushkumar Rana, Rakeb Kifle, Jun Sup Lim, **Tirtha Raj Acharya**, Chung Tae Kim, Eun Ha Choi  
**Chemical Engineering Journal: (I.F. 15.1)**

2024

[Enhanced degradation of aqueous caffeine via cylindrical dielectric barrier discharge plasma: Efficacy and toxicity insights](#)

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Roshani Dahal, Oat Bahadur Dhakal, **Tirtha Raj Acharya**, Prajwal Lamichhane, Khadija Akter, and Eun Ha Choi  
**Chemosphere: (I.F. 8.1)**

2025

[Chemical Analysis of Plasma-Activated Culture Media by Ion Chromatography](#)

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Marcello Locatelli, Miryam Perrucci, Marwa Balaha, **Tirtha Raj Acharya**, Nagendra-Kumar Kaushik, Eun-Ha Choi, Monica Rapino, Vittoria Perrotti  
**Pharmaceuticals: (I.F. 4.3)**

2025

[Translational application of cold atmospheric plasma in periodontology and implantology: where are we? A systematic review of in vivo studies in human and animal models](#)

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Giorgia Stornelli, Giulia Petrucci, Vito Carlo Alberto Caponio, Eloisa Sardella, Giuseppe Balice, Beatrice Femminella, Michele Paolantonio, Ilaria Cela, **Tirtha Raj Acharya**, Nayansi Jha, Nagendra Kumar Kaushik, EunHa Choi, Valentina Puca, Rossella Grande, Vittoria Perrotti  
**Journal of Evidence-Based Dental Practice: (I.F. 4.1)**

2024

[Enhancing oyster mushroom growth and yield using air gliding arc discharge](#)

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Roshan Chalise, Prajwal Lamichhane, Deepak Niure, Abdul Klam Khan, Sangat Sharma, Suresh Basnet, Pradeep Lamichhane, **Tirtha Raj Acharya**, Raju Khanal  
**Journal of Physics D: Applied Physics: (I.F. 3.1)**

2024

[Inactivation of Pseudovirus Expressing the D614G Spike Protein Mutation using Nitric Oxide-Plasma Activated Water](#)

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Paritosh Patel, Neha Kaushik, **Tirtha Raj Acharya**, Sudakshya S Lenka, Soujanya Ghosh, Rizwan Wahab, Suresh K Verma, Eun Ha Choi, and Nagendra Kumar Kaushik  
**Advanced Science: (I.F. 14.3)**

2024

[Nonthermal plasma boosted dichloroacetate induces metabolic shifts to combat glioblastoma CSCs via oxidative stress](#)

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Apurva Jaiswal, Neha Kaushik, Paritosh Patel, **Tirtha Raj Acharya**, Subhadip Mukherjee, Eun Ha Choi, and Nagendra Kumar Kaushik  
**Free Radical Biology and Medicine: (I.F. 7.1)**

2024

[Sintering Behavior of Borate-Based Glass Ceramic Solid Electrolytes for All-Solid Batteries](#)

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Jeong Min Lee, Dong Seok Cheong, Sung Hyun Kang, **Tirtha Raj Acharya**, Eun Ha Choi, and Weon Ho Shin  
**Journal of the Korean Institute of Electrical and Electronic Material Engineers: (I.F. 1.2)**

2025

[Human head and neck cancer cell lines response to cold atmospheric plasma activated media is affected by the chemistry of culture media](#)

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Viviana di Giacomo, Marwa Balaha, Asia Pece, Ilaria Cela, Gianluca Fulgenzi, Giovanna Orsini, Tatiana Spadoni, **Tirtha Raj Acharya**, Nagendra Kumar Kaushik, Eun Ha Choi, Monica Rapino, Mariangela Mazzone, Gabriella Mincione, Gianluca Sala, Eloisa Sardella, Vittoria Perrotti  
**Heliyon: (I.F. 3.4)**



2024

## Development and characterization of atmospheric pressure gliding Arc plasma jet

Roshan Chalise, Santosh Dhungana, Sangat Sharma, Suresh Basnet, Hom Bahadur Baniya, **Tirtha Raj Acharya**,  
Pradeep Lamichhane, Raju Khanal  
(Physica Scripta: I.F. 2.6)

2024

## Investigating the synergy of rapidly synthesized iron oxide predecessor and plasma-gaseous species for dye-removal to reuse water in irrigation

Prajwal Lamichhane, **Tirtha Raj Acharya**, Oat Bahadur Dhakal, Roshani Dahal, and Eun Ha Choi  
(Chemosphere: I.F. 8.1)

### ● ORGANIZATIONS

#### Member

1. Lifetime member of the Nepal Physical Society (NPS), Nepal.
2. Member of the Plasma Science Society of Nepal (PSSN), Nepal.
3. Student member of the Korean Physical Society (KPS), (2022-2023), South Korea.

### ● RECOMMENDATIONS

**Eun Ha Choi** Professor (Ph.D. Supervisor)

Plasma Bioscience Research Centre/Department of Electrical & Biological Physics  
Kwangwoon University  
Convenor, WG41 IEC-SC62D  
Director, Plasma Bioscience Research Center  
Cell: 010-2240-5236 (International: +82-10-2240-5236)  
Tel: 02-940-5236 or 8616 (International: +82-2-940-5236 or 8616)  
Fax: 02-940-5660 or 5664 (International: +82-2-940-5660 or 5664)  
Email: ehchoi@kw.ac.kr  
Website: <http://pbrc.or.kr>, <http://pdp.kw.ac.kr>

Email [ehchoi@kw.ac.kr](mailto:ehchoi@kw.ac.kr) | Phone (+82) 21022405236

**Nagendra Kumar Kaushik** Professor

Department of Electrical & Biological Physics,  
Plasma Bioscience Research Center  
Kwangwoon University, Seoul, Korea 01897  
Gmail: [kaushik.nagendra@gmail.com](mailto:kaushik.nagendra@gmail.com) (Personal)  
Website: <https://www.linkedin.com/in/nagendra-kumar-kaushik-88650614/>

Email [kaushik.nagendra@kw.ac.kr](mailto:kaushik.nagendra@kw.ac.kr) | Phone (+82) 1041878618

**Pradeep Lamichhane** Postdoctoral Researcher

School of Engineering, University of Warwick  
Coventry, CV4 7AL, UK  
Gmail: [theprodi@gmail.com](mailto:theprodi@gmail.com) (Personal)  
Website: [https://warwick.ac.uk/fac/sci/eng/people/pradeep\\_lamichhane](https://warwick.ac.uk/fac/sci/eng/people/pradeep_lamichhane)

Email [pradeep.lamichhane@warwick.ac.uk](mailto:pradeep.lamichhane@warwick.ac.uk) | Phone (+44) 07446460030

**Bhanu Shrestha** Professor

Department of Electronic Engineering  
Kwangwoon University, Seoul, Korea 01897  
Gmail: [bnu56@yahoo.com](mailto:bnu56@yahoo.com) (Personal)  
Website: [linkedin.com/in/dr-bhanu-shrestha-65109614](https://www.linkedin.com/in/dr-bhanu-shrestha-65109614)

Email [bnu@kw.ac.kr](mailto:bnu@kw.ac.kr) | Phone (+82) 1045904460