

# National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

## Curriculum Vitae



Brief Profile: 1-2 paragraphs (not exceeding 500 words)

Dr. Laiju A R joined as Assistant Professor (AGP 7000) in the Department of Civil Engineering, NIT Tiruchirappalli in 2022 after serving more than eight years as Assistant Professor (AGP 6000) in NIT Uttarakhand. He received his B. Tech in Civil Engineering from TKM College of Engineering (Kerala), M. Tech in Environmental Engineering from NIT Tiruchirappalli and Ph. D. in Environmental Engineering from IIT Roorkee in 2020. His area of interest includes Ion Exchange Technology to remove trace toxic contaminants, Synthesis and Validating the Performance of Hybrid Sorbents for water, wastewater and industrial wastewater treatment applications, Advanced Oxidation Technology, Solid Waste Management, Rural Development and Environmental Impact Assessments. He has successfully completed Govt. of India funded projects like the development of Ganga Gram under Namami Gange Program and Unnat Bharath Abhiyan as Project Lead and provided suitable sustainable solutions to selected villages namely Bagi, Pharasu, Janasu, Kaliya Saud and Dungri Panth.

1.	Name:	Dr. Laiju A. R
2.	Designation:	Assistant Professor
3.	Office Address:	Department of Civil Engineering, National Institute of Technology, Tiruchirappalli - 620015, Tamil Nadu, India
4.	Telephone (Direct) (Optional): Telephone : Extn (Optional): Mobile (Optional):	+91-9760000529
5.	Email (Primary):	laiju@nitt.edu

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Email (Secondary):	laijuar739@gmail.com
6. Field(s) of Specialization:	Environmental Engineering

7. Employment Profile

Job Title	Employer	From	To
Assistant Professor (AGP 6000)	NIT Uttarakhand	14/07/2014	18/10/2022
Assistant Professor (AGP 7000)	NIT Tiruchirappalli	20/10/2022	Till date

8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D.	IIT Roorkee	2020	-	Environmental Engineering
M. Tech	NIT Tiruchirappalli	2014	First Class	Environmental Engineering
B. Tech	TKM College of Engineering, Kerala.	2012	First Class	Civil Engineering
HSC	Kerala State Board	2006	Distinction	-
SSLC	Kerala State Board	2004	Distinction	-

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Member (Safety Audit Committee)	Institute	17/11/2022	Till date

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
Faculty In charge - Sports	NIT Uttarakhand	23/09/2014	10/08/2015
Faculty In-Charge - Examination	NIT Uttarakhand	01/08/2014	04/01/2015
Faculty In-Charge Technical activity and Movie Club	NIT Uttarakhand	11/08/2015	23/07/2017
Principal Coordinator - Namami Gange Programme	NIT Uttarakhand	10/08/2016	11/09/2019
Faculty In-Charge - Environmental Engineering Laboratory	NIT Uttarakhand	04/06/2015	18/10/2022
Faculty In-Charge Alumni Association	NIT Uttarakhand	24/07/2017	12/07/2018
Faculty In-Charge - Library	NIT Uttarakhand	31/07/2018	23/07/2019
Principal Coordinator- Unnat Bharat	NIT Uttarakhand	12/07/2018	08/12/2021

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Abhiyan (UBA)			
Coordinator - Community Development Initiatives	NIT Uttarakhand	12/07/2018	08/12/2020
Environmental Coordinator – TEQIP (III)	NIT Uttarakhand	09/08/2018	31/01/2022
Coordinator - Accreditation	NIT Uttarakhand	24/07/2019	19/07/2020
Convenor -DUGC	NIT Uttarakhand	24/07/2019	19/07/2020
Coordinator- Student Activities	NIT Uttarakhand	20/07/2020	22/08/2021
Member of Consortium of Science & Technology Institutes (CSTI)	IIT Kanpur	26/10/2020	18/10/2022
Nodal officer for inspection/verification of Annual Inventory on Hazardous Waste Management	CPCB	10/04/2021	18/10/2022
Member of Centre for Renewable Energy and Sustainability Environmental Technologies	NIT Uttarakhand	10/08/2021	18/10/2022
Coordinator – R&C	NIT Uttarakhand	23/08/2021	18/10/2022
Nodal officer for Annual Inspection of Grossly polluting industries operating in river Ganga and Yamuna main stem states.	CPCB	10/11/2021	18/10/2022
Faculty Coordinator -Student Mess	NIT Uttarakhand	21/04/2022	18/10/2022
Departmental Coordinator (Virtual Lab)	NIT Uttarakhand	08/08/2022	18/10/2022
Coordinator – Faculty Activities	NIT Uttarakhand	01/08/2022	18/10/2022
Coordinator – Innovation Club	NIT Uttarakhand	01/08/2022	18/10/2022

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2022	Patent Grant	Indian Patent Office

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
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13. Details of Academic Work

(i) Curriculum Development

B. Tech Civil Engineering at NIT Uttarakhand

(ii) Courses taught at Postgraduate and Undergraduate levels

Undergraduate level:

- a. Environmental Science
- b. Environmental Engineering -I

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- c. Environmental Engineering- II
- d. Industrial Wastewater Treatment
- e. Urban Water and Environmental Management
- f. Environmental Impact Assessment
- g. Fluid Mechanics
- h. Hydrology and Irrigation Engineering

(iii) Projects guided at Postgraduate level

Project Guided at B. Tech Level

- a. Synthesis of hybrid nanoparticles for water treatment applications.
- b. In situ synthesis of polymer-supported metal nanoparticles.
- c. Trace removal of Cr(VI) by strong base anion exchange resins.
- d. Trace Removal of Cr(VI) by weak base anion exchange resins.
- e. Application of FeS<sub>2</sub> nanoparticles for zinc removal from water.
- f. Modelling of kinetic, isotherm and column Study for Cr(VI) removal using ion exchange resin.
- g. Solid waste management in Jaipur
- h. Design of sanitary Landfill for the disposal of solid waste generated in Jaipur City
- i. Insect based biodegradable waste management
- j. Disposal of biodegradable waste generated within the MNIT Jaipur campus
- k. Solid waste management in Srinagar, Uttarakhand
- l. Multicriteria decision-making tool for solid waste management.

(iv) Other contribution(s)

#### 14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Namami Gange	Ministry of Water resources, River Development & Ganga Rejuvenation	10/08/2016	11/09/2019	Completed
Unnat Bharat Abhiyan (UBA)	Ministry of Human Resource Development	12/07/2018	08/12/2021	Completed

#### 15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role (Supervisor/ Co-Supervisor)	Year of Award
Rahul Raj	Polymer supported metal nanoparticles for the trace removal of contaminants from contaminated water.	Co-Supervisor	On-going

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16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue
December 21-23, 2018	Conference	International	Participant	NIT Patna	Department of Civil Engineering, NIT Patna
January 18 – 20, 2018	Conference	International	Paper presenter	GEC Thrissur	Department of Civil Engineering, GEC Thrissur

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
Workshop	National	11- 15 May, 2019 2018	Coordinator	NIT Uttarakhand, Satellite campus (MNIT Jaipur)
Workshop	Local	27 August 2017	Coordinator	NIT Uttarakhand
Conference	National	21- 23 December 2017	Member, Organizing Committee	NIT Uttarakhand

18. Invited Talks delivered

Topic	Date	Inviting Organization
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19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member )	Organization	Membership No. with date
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20. Academic Foreign Visits

Country	Duration of Visit	Programme
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21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
A R. Laiju, S. Sarkar	A novel hybrid ferrous sulfide impregnated anion exchanger for trace removal of hexavalent chromium from contaminated water	Chemosphere	305	1353-69	2022	8.943.
P V Nidheesh, Akeem Adeyemi Oladipo, Nael G. Yasri, A R Laiju, V R Sankar Cheela, Abdoulaye Thiam, Yemane G Asfaha, S Kanmani, Edward (Ted) P. L Roberts	Emerging applications, reactor design and recent advances of electrocoagulation process	Process Safety and Environmental Protection	166	600-616	2022	7.926
G. V. Koulini., A. R. Laiju., S. T. Ramesh., R. Gandhimathia., P. V. Nidheesh.	Effective degradation of azo dye from textile wastewater by electro-peroxone process.	Chemosphere	289	1331-52	2022	8.943
Gopinath, A., Divyapriya, G., Srivastava,	Conversion of sewage sludge into biochar: A potential	Environmental Research	194	1106-56	2021	5.026

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V., A. R Laiju., Nidheesh, P.V. and Kumar, M.S.	resource in water and wastewater treatment.					
K.K. Rubeena, P. Hari Prasad Reddy, A. R Laiju, P.V. Nidheesh.	Iron impregnated biochars as heterogeneous Fenton catalyst for the degradation of acid red 1 dye	Journal of Environmental Management	226	320 - 328.	2018	4.005
A R Laiju, T. Sivasankar, P. V. Nidheesh.	Iron-loaded mangosteen as a heterogeneous Fenton catalyst for the treatment of landfill leachate	Environ Sci  Pollut. Res	21	1090 0– 1090 7	2015	2.8

**(B) Conferences/Workshops/Symposia Proceedings**

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
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**(C) Books & Monographs**

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number
A R Laiju, Muskan Mayank, S Sarkar, P K Sharma	Study and Modelling of Trace Contaminant Transport Under Drowned Condition	Springer	2022	1872-4663
A R Laiju, S. Sarkar	A novel hybrid material for the trace removal of hexavalent chromium [Cr (VI)] from contaminated water	CRC Press	2018	9781351124140