Curriculum Vitae

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

Ruben Sudhakar D is currently working with Department of Energy and Environment, NIT Tiruchirappalli (NITT). Prior to joining NITT, he was serving as Assistant Professor in the Department of Chemical Engineering, National Institute of Technology Karnataka (NITK). Before starting his stint with academia he was a Lead Research Engineer at Renewable Energy Innovation Centre of Siemens Technology and Services Private Ltd., Bangalore, working on various energy conversion technologies for distributed power generation. He earned his Ph.D. from IIT Madras and M.Tech. on Energy Conservation and Management from School of Energy, Tiruchirapalli. His research interests include: Power generation from coal and biomass, Energy system analysis, CO_2 capture technologies, and Energy conservation and management in process industries. He has published his research findings in several reputed journals and conference proceedings. As a Qualified Energy Auditor and Manager, he is also providing consultancy services to industries on Energy conservation.

1. Name RUBEN SUDHAKAR D
2. Designation: ASSISTANT PROFESSOR (GRADE I)
3. Office Address: DEPARTMENT OF ENERGY AND ENVIRONMENT
4. Telephone (Direct) (Optional):
   Telephone : Extn (Optional):
   Mobile (Optional):
5. Email (Primary): rubensudhakar@nitt.edu Email (Secondary):
6. Field(s) of Specialization: Heat and Power from Solid Fuels, CO_2 Capture Technologies, Energy System Analysis, Energy Conservation and Management Solutions
7. Employment Profile

Job Title	Employer	From	To
Assistant Professor	National Institute of Technology Tiruchirappalli	18/06/2018	Till date
Assistant Professor	National Institute of Technology Karnataka	15/07/2013	15/06/2018
Lead Research Engineer, Renewable Energy Innovation Centre	Corporate R&D, Siemens Technology and Services Private. Ltd.	17/01/2011	31/05/2013

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

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D	IIT Madras			Energy
M.Tech.	School of Energy, Bharathidasan University			Energy Conservation and Management
B.Tech.	University of Madras			Chemical Engineering

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2007/2014	Accredited Energy Auditor and Manager	Bureau of Energy Efficiency (BEE), Govt. of India
2008	First Prize – "Green Campus"	IIT Madras- Energy Forum

	Project Competition	
2007	First runner-up prize for the best poster	IIChe - Diamond Jubilee Year Awards

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)

13. Details of Academic Work

(i) Curriculum Development

(ii) Courses taught at Postgraduate and Undergraduate levels

a. Process Modelling and Simulation - PG
b. Heat Transfer – UG
c. Transport Phenomena -PG
d. Particulate Technology – UG
e. Energy Technology – UG
f. Energy Conservation and Management in Process Industries – UG
g. Petroleum Engineering – UG
h. Mineral Dressing - UG

(iii)Projects guided at Postgraduate level

a. Study on synergistic effects during co-pyrolysis of raw biomass-raw biomass, coal-raw biomass and coal-torrefied biomass using thermogravimetric analyzer
b. Design and development of mixer for firework chemicals
c. Experimental studies on producer gas generation in a downdraft gasifier in conjunction with pyrolyser
d. Fragmentation of Limestone during calcination in a bubbling fluidized bed
e. Devolatilization and Primary Fragmentation of Indian Coal in a Fluidized Bed Combustor
f. Coal Char Fragmentation and Combustion in a Fluidized Bed Combustor

(iv)Other contribution(s)

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Methanol as a clean source of energy for India	US-India Educational Foundation	01-08-2016	31-7-2019	Ongoing

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award

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

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

18. Invited Talks delivered

Topic	Date	Inviting Organization
Recent Advances in Nano Energy Systems	06th April, 2018	Coimbatore Institute of Technology (CIT), Coimbatore
Climate Change and Carbon Foot-print	24th March, 2018	Executive training program, Mangalore Refinery and Petrochemicals (MRPL) Ltd.
Noise Pollution	24th March, 2018	Executive training program, Mangalore Refinery and Petrochemicals (MRPL) Ltd.
Energy from Biomass - Sustainability Issues and	28th February, 2018	Saveetha School of Engineering, Chennai

Challenges		
Thermo-Chemical Conversion of Biomass for Energy – Issues and Future Prospects	20th November, 2017	Coimbatore Institute of Technology (CIT), Coimbatore
Mechanical Operations for production executive trainees	11th August to 10th November, 2016	Mangalore Chemicals and Fertilizers, Training programme for production executive trainees
Biomass Conversion Technologies: Current Trends and Future Needs	12th September 2014	IIST, Indore
Biomass Gasification: R, D & D Needs and Challenges	4th May, 2013	Vellore Institute of Technology, Chennai
Biomass Combustion: A Sustainable Technology	24th February, 2013	IIT Madras

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Life Member	ISHMT	
Life Member	ISTE	
Life member	IEI	
Life member	The Combustion Institute- Indian Section (CIIS)	

20. Academic Foreign Visits

Country	Duration of Visit	Programme
Sweden	One Month	Chalmers University of Technology

21. Publications

(A) Refereed Research Journals: (Selected)

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
K. Sekar Pragadeesh and ***D. Ruben Sudhakar***	Color Indistinction Method for the Determination of Devolatilization Time of Large Fuel Particles in Chemical Looping Combustion	Energy & Fuels (American Chemical Society)	Vol. 33 Issue 5,	4542-4551	2019	3.091
K. Sekar Pragadeesh and ***D. Ruben Sudhakar***	Primary Fragmentation Behavior of Indian Coals and Biomass during Chemical Looping Combustion	Energy & Fuels (American Chemical Society)	Vol. 32 Issue 5	6330-6346	2018	3.091
D. Ruben Sudhakar and Ajit Kumar Kolar	Visualization and characterization of thermo-physical behaviour of wood during devolatilization in a hot fluidized bed using X-ray radiography technique	Fuel	112	208-223	2013	5.128
D. Ruben Sudhakar and Ajit Kumar Kolar	Devolatilization of Wood in Hot Fluidized Bed: Effect of Particle Size, Shape and Bed Temperature	Journal of Analytical and Applied Pyrolysis	92	239-249	2011	3.47
D. Ruben Sudhakar and Ajit Kumar Kolar	Transient Three-dimensional Mathematical Model and Experimental Investigation of a Wet Devolatilizing Wood in a Fluidized Bed	Energy and Fuels	24	4820-4832	2010	3.091
D.Ruben Sudhakar, K. Srinivas Reddy, Ajit Kumar Kolar, and Bo Leckner	Fragmentation of wood char in a laboratory scale fluidized bed combustor	Fuel Processing Technology	89 Issue 11	1121-1134	2008	4.507
M. Sreekanth, D. ***Ruben Sudhakar***, B.V.S.S.S. Prasad, Ajit Kumar Kolar, and Bo Leckner	Modelling and experimental investigation of devolatilizing wood in a fluidized bed Combustor	Fuel	87 Issue 12	2698-2712	2008	5.128

For complete list of publications please refer:
https://scholar.google.co.uk/citations?user=FlxlHVcAAAAJ&hl=en

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

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
K.S. Pragadeesh, ***D. Ruben Sudhakar***	Experimental investigation of devolatilisation of Indian coal and biomass in Chemical Looping Combustion	First International Conference on Energy and Environment: Global Challenges		Energy and Environment: Global Challenges	NIT Calicut	2018
D. Ruben Sudhakar, and Ajit Kumar Kolar	Digital X-Ray Radiography Technique for the Study of Char Formation	International conference on "Advances in Energy Research", ICAER		Advances in Energy Research	IITBombay	Dec., 2009

(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number
Vasudevan N.K., ***Ruben Sudhakar D***	Book Chapter: Optimal Off-Grid Hybrid Options for Power Generation in Remote Indian Villages: HOMER Application and Analysis.	Materials, Energy and Environment Engineering. Springer, Singapore	2017	ISBN 978-981-10-2675-1