

National Institute of Technology, Tiruchirappalli:

Curriculum Vitae



1. Name: Dr.A.K.Bakthavatsalam
2. Designation: Professor
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5. Email (Primary):baktha@nitt.edu Email-2: baktha63@gmail.com
6. Fields of Specialization:
 - Energy Efficiency & Management
 - Coal Technology & Steel
 - Career guidance, counselling and motivation
 - Organizational Behavior
 - Executive Coaching
 - Social Outreach
7. Employment Profile

Job Title	Employer	From	To
Professor	NIT-Trichy	2005 1999	Till date 2002
Engineer Trainee to Chief -M	SAIL	1985 2002	1999 2005

8 a. Academic Qualifications:

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D (Direct)	IIT-Delhi	1996	1 st	Energy Studies
B.Tech	IIT-Madras	1985	1 st	Chemical
+2	CBSE	1980	1 st	Science

8 b. Professional Qualifications:

1	Certified Energy Auditor	Bureau of Energy Efficiency, Govt of India
2	Certified Six Sigma Green Belt	IIM-Kolkata
3	Certified MBTI Administrator	Asianic Psychology Press
4	Certified Lead Auditor - QMS	British Standards Institution
5	Certified Trainer	Indian Society for Training & Development

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9. Academic/Administrative Responsibilities within the University

Position	Dept/Institution	From	To
Dean (FW/ID)	Institute level	2010	2012
Convener	Institute level	2007	2009
Chairman – Finance – Sub-committee (Eqpt purchase)	Institute level	2015	2015
Asst. Public Info Officer (Placements)	Institute level	--	Till date
Faculty Advisor – REM & MEM	Institute level	2005	Till date
Faculty Advisor – Incredible NITT	Institute level	2015	Till date
Faculty Advisor – HumaNITTy	Institute level	2012	Till date
Coordinator – DAA/YAA	Institute level	2012	2016
Founder Faculty Advisor - OAR	Institute level	2012	2014
Chairman – Hindi Cell	Institute level	2012	2014

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
HRD Council Member	BHEL	2014	Till date
Governing Council Member	Rane Polytechnic	2016	Till date
Expert Member	Ministry of Steel for Contifur furnace	2008	2008
Founder Director	CEDI	2013	2015
Nodal Officer	Rashtriya Avishkar Abhiyan, MHRD	2015	Till date
Convener – III Panel	CII- Trichy	2002	2002

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
1988	Jawahar Award – Best Executive	SAIL
2012	Best Placement Officer	WEC
2015	National Award for NITT for Best Institute Social Responsibility	FICCI
2016	National Award for NITT Excellence in Employability	FICCI

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

Improved Energy Eng to incorporate BEE concepts and principles

The peer-to-peer CPC series placement preparation with equal emphasis on the 5 elements of assessments

PrIME – Program on Introspection, Motivation and Effectiveness - Exclusive motivational program for BHEL Executives

(ii) Courses taught at Postgraduate and Undergraduate levels

M.Tech (Energy Eng) – Energy Audit & Management

M.Tech (Const Tech & Mgt) – Organizational Behavior

(iii) Projects guided at Postgraduate level

SPV Plant

Energy Audit in Textile industry

Built environment energy efficiency

(iv) Other contribution(s)

Instrumental in bringing in on-campus facility of

- German Language by Goethe Institut
- DAAD scholarships for summer internship
- CAT / GRE / GMAT preparations

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
IIIPC	AICTE	2001	2003	Completed
e-CAP	Sterlite Copper	2001	2001	Completed
Preparing Graduates for Business Life	UKIERI	2013	2015	Completed
2*100kWp - Roof-Top SPV Power	NITT	2013	2015	Completed
PCM in TES for solar applications	DST	2015	2018	Ongoing

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
P.Selvakumaran	Studies on the Mineralogical influence in Circulating Fluidized Bed Combustion of Western region Indian lignite	Supervisor	2016

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16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc.

Date	Title of Activity	Level of Event	Role	Event Organized by	Venue
1988	Energy Management in Steel Industry	International	Participant	SAIL/ British Steel Corp., UK / UNIDO	BSC, UK
1991	Energy Management for Manufacturing Industries	National	“	ASCI	ASCI, Hyd
1994	Strategic Planning in a Competitive Environment	National	“	SAIL/IIM-B	IIM-B
2002	ISO 14000 Systems & Procedures. Infusion of Environmental Concepts in Management Education	National	“	IIM-B	IIM-B
2006	Six Sigma Green Belt	National	“	IIM-C	IIM-C
2007	Mentoring and Counseling	National	“	ASCI	ASCI, Hyd
2008	Career Counseling@ Univ of Illinois, Chicago	International	“	TEQIP/ UIC	USA
2008	7-Habits by Stephen Covey	National	“	TEQIP	Munnar
2011	Technology Valorization and Management	National	“	ASCI	ASCI, Hyd
2012	Solar PV Installer training program, Chennai, 2012	National	“	UL Knowledge	Chennai
2013	Design of sub-systems for CSP	National	“	ICASSET	IIT-Jod
2014	Certified Trainer	National	“	ISTD	N.Delhi

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

Date	Title of Activity	Level of Event	Role	Event Organized by	Venue
2001	Session on Information Sharing of Facilities and Expertise	Regional	Organizer/ Speaker	CII, Trichy	RECT
2001	Southern Regional Workshop on National Technical Manpower Information System	Regional	Co-Chair	AICTE, SR	Chennai
2008	4 th All India Science and Spiritual Quest	International	Secretary	Bhaktivedanta Institute	NITT
2015	Faculty Dev Program	National	Organizer/ Speaker	NITT under UKIERI	NITT
2013-2016	Workshop series for over 700 BHEL Executives	National	Coordinator /Speaker	BHEL	BHEL/ NITT

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18. Invited Talks delivered

Topic	Date	Inviting Organization
HR Summit	2006	NASSCOM
Sourcing and shaping talent	2009	Indo French Chamber of Commerce and Industry
Energy accounting principles – IISI methodology	2003	Institution of Engineers
Career Counseling Session	2011	The Hindu (Education Plus)
Skill Development for Young Engineers to Reform the Core Sector	2016	I.E – 49 th Engineers day celebrations
Business and Effective communication	2016	Toastmasters International

19. Membership of Learned Societies

Type of Membership	Organization	Membership No. with date
Life Fellow	Institution of Engineers	F-114193-9 dt.13/5/09
Life Member	Indian Society for Technical Education	2006
Life Fellow	Society for Energy Engineers and Managers (SEEM)	EA-3977, 2011
Life Member	Indian Society for Training & Development	March, 2015

20. Academic Foreign Visits

Country	Duration of Visit	Programme
UK	6 weeks	UNIDO Program on Energy Conservation in Steel Plants at British Steel Corp, UK
USA	6 weeks	University of Illinois, Chicago, TEQIP
UK	3 weeks	Brunel University, UKIERI
Egypt	4 days	International Conference – paper presentation
Cyprus	4 days	International Conference – paper presentation
Greece	4 days	International Conference – paper presentation
Thailand	4 days	APO

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21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor
Bakthavatsalam and Choudhury	Specific Energy Consumption in the Steel Industry	<i>Energy – The International Journal</i> , Pergamon	Vol.20, no.12	1247-1250	1995	3.6
Ritu Singh, Bakthavatsalam and Choudhury	Desulfurization of various Indian Coals by Hydrogen Donor Solvent Extraction	<i>FUEL</i> Elsevier	Vol.72, no.5	707-708	1995	3.4
Bakthavatsalam and Choudhury	Beneficiation of Indian Coals by Chemical Techniques	<i>Energy Conversion & Management</i> Elsevier	Vol.38, No.2	167-171	1997	2.7
Bakthavatsalam and Choudhury	Energy Inefficiency of Indian Industry – Scope for Energy Conservation	<i>Energy Conversion & Management</i> Elsevier	Vol.38, no.2	173-178	1997	2.7
Bakthavatsalam	Guiding Principles for Accounting Consumption of Energy in Multi-unit Process Industries	<i>Energy Engineering</i> Taylor & Francis	Vol.107 No.4.	68-80	2010	0.8
Selvakumaran and Bakthavatsalam	Mineralogical influence of mining intrusions in CFB combustion of Indian lignite	<i>International Journal of Energy and Environmental Engineering</i>	4:34, Springer	4:34	2013	0.8
Selvakumaran and Bakthavatsalam	Influence of Sorbent Characteristics on Fouling and Deposition in Circulating Fluid Bed boilers firing High Sulfur Indian Lignite	<i>Journal of Combustion</i> Hindawi	438384	438384	2013	0.9
Selvakumaran and Bakthavatsalam	Effect of additives on sintering of lignites during CFB combustion	<i>Applied Thermal Engineering</i> Elsevier	vol. 67	480-488	2014	2.7
Bakthavatsalam	100 kWp SPV Power Plant at NIT Trichy	<i>Akshay Urja MNRE</i>	vol.7	20-21	2014	
Dayana and Bakthavatsalam	Optimization of phenol degradation by the microalga <i>Chlorella pyrenoidosa</i> using Plackett–Burman Design and RSM	<i>Bioresource Technology</i> Elsevier	vol. 207, 150-156	150-156	2016	5.7

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(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page no.	Conference Theme	Venue	Year
Bakthavatsalam and Choudhury	Coal Ash Minimization – Towards Creation of Net Available Energy	National Systems Conf	65	Energy Systems	IIT, Roorkee	1992
Bakthavatsalam and Choudhury	Chemical Beneficiation of Indian Coals	<i>National Conference on Clean Coal Technology</i>	65	Clean Coal Technology	IICT, Hyd	1994
Bakthavatsalam	Relevance of Engineering Courses - Issues and Experiences	<i>National Tech Manpower Info System</i>	7	NTMIS	AICTE, Chennai	2001
Bakthavatsalam and Arumugam	Some issues on seamless Integration of Engineering Education and Workplace Requirements	<i>Workshop on Industry Academic Partnership</i>	7	II Interaction	BHEL	2002
Gururaj and Bakthavatsalam	English literacy through Computer literacy	6th International Asiaticall Conference		Literature and Communication	IIM, Indore	2007
Bakthavatsalam	Monitoring of Butane - Propane mixture for improved energy efficiency of LPG fired furnaces	11th International Conference on Energy and Environment		Energy and Environment	NRC, Egypt	2009
Bakthavatsalam	Derivation of pyritic and organic sulfur distribution from total sulfur in various coals using statistical techniques	10 th International Conference on Clean Energy		Clean Energy	ERC, EMU, Cyprus	2010
Dayana and Bakthavatsalam	Biodegradation of Phenolic Effluent of Producer Gas Plant using <i>Scenedesmus</i> sp.	IWWATV'15		Indl. Waste Water Treatment	Greece	2015

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(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number
A.K.Bakthavatsalam, T.V.Singh, Anita.S	Monograph on Energy Conservation	SAIL, N.Delhi	1996	----
Pradeep, Ramya, Ramana, Avinash, , Amol, Bakthavatsalam	Incredible NITT	NITT	2015	ISBN-9789384439101
A.K.Bakthavatsalam, R.Gururaj	Bedtime Mailbox	Unicorn Books, N.Delhi	2007	ISBN-9788178061269

Significant contributions towards Institute development:

- Enabled FICCI **National award for NITT** excellence in Employability
- Enabled FICCI **National award for NITT** for excellence in Social Responsibility by integrating all SR clubs under HumanITTy – the Daan Utsav initiative of NITT
- Anchored launch of first time ever, **user funded PG program** in NITs – L&T – funded M.Tech (CT&M); joined the league of IIT-M & IIT-D
- Established the **Office of Alumni Relations (OAR)** - a long felt need for bridging the gap between the Institute and the alumni. Only NIT to have an OAR
- Instrumental in catalyzing alumni relations through DAA/YAA award events and RUs leading to quantum **leap in alumni connect** and give back like IoT lab and SCIENT Innovation Centre etc
- Implemented the very **first outsourcing of messes**
- Founder Faculty Advisor, NITT's first ever Nature club which brought out NITT's first ever **coffee table book Incredible NITT**
- Founder Director, CEDI – NITT's first and only Section 8 Company for nurturing innovation and incubation.
- Implemented NITT's first ever 2*100 kWp SPV roof top power plants
- Faculty Advisor – MEM - Only Institute to have a Reminiscence book for PGs
- Prepared entire documentation for free allocation of MiG-23 by IAF