DR. RAMIS M.K

Vice Principal
Professor and Head: Department of Mechanical Engineering
Professor in Charge: Training and Placement
P.A. College of Engineering
Mangalore Karnataka
India

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Summary

DR. Ramis M.K has done his graduation in Mechanical engineering from Kerala University And M.Tech in Thermal Sciences from NIT, Calicut. He has done his Ph.D. in Computational Fluid Dynamics from NIT, Calicut. He has 16 years 9 months of teaching experience. His paper on "Conjugate heat transfer analysis of a heat generating vertical plate" has been awarded with Top 25 Hottest Articles of Elsevier IJHMT during 2006. His areas of interest are Computational Fluid Dynamics, Nano fluids.

Academics

Degree	Board	Institution	Specialisation	Year
Ph.D	NIT Calicut	National Institute of Technology, Calicut	Computational Fluid Dynamics	2010
M.Tech	NIT Calicut	National Institute of Technology, Calicut	Thermal Sciences	2004
B.Tech	Kerala University	T.K.M College of Engineering, Kollam Kerala	Mechanical Engineering	1997
12th	Pre-Degree Exam Board Kerala	Sree Narayana College Kannur	Science, Maths	1993
10th	CBSE	Chinmaya Vidyalaya Kannur	-	1991

Teaching Experience

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Total 16 years 9 months **Post-Ph.D**. 6 years

Designation	Institution	Period
Professor and Head	Department of Mechanical Engineering P.A. College of Engineering Mangalore	December 2012 -Till date
Professor	P.A. College of Engineering Mangalore	April 2010-December 2012
Associate Professor	P.A. College of Engineering Mangalore	December 2008-April 2010
Assistant Professor	P.A. College of Engineering Mangalore	January 2006- December 2008
Lecturer	P.A. College of Engineering Mangalore	October 2000-December 2005
Lecturer	Government Polytechnic Kannur	August 1999-March 2000
Lecturer	Anjuman Engineering College Bhatkal	October 1998- July 1999

Industrial Experience

Total 2 months

Designation	Institution	Period
Trainee	Western India Plywoods Kannur	Aug 1998- Sep1998

Other Administrative Posts Held

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Designation	Institution	Period
Vice Principal	P.A. College of Engineering Mangalore	April 2015 till date
Professor and Head	Department of Mechanical Engineering P.A. College of Engineering Mangalore	December 2012 -Till date
Professor in Charge (Training and Placement)	P.A. College of Engineering Mangalore	April 2011-Till date

Student Welfare Officer	P.A. College of Engineering Mangalore	April 2010-April 2011

Research Guidance

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PG/Ph. D	Number of Candidates	Status
Ph. D	3	Ongoing
M Tech	1	Completed
M Tech	3	Ongoing

Ph.D. Research Scholar Name	Research Area	Status
1. Mohammed Samee	Heat Transfer Analysis of Rectangular Plates Cooled by Various Coolants	Ongoing
2. Abdul Razak	Thermal performance & fluid flow characteristic of a rectangular plate, with heat generation, dissipating heat in to a surrounding fluid medium.	Ongoing
3. Asif Afsal	Parallelization strategies for CFD softwares	Ongoing

M. Tech Student Name	Research Area	Status
Mohammed Adnan Sani	Naofluids	Ongoing
Yashwantha K M	Nanofluids	Ongoing
Jawad Pasha	Nanofluids	Ongoing
Abdul Rahman	CFD	Completed

UG Project Guidance

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Number of Candidates	Status
2	Ongoing

15	Completed

Sl. No	Project Title	Year	Student
1	Study On Heat Transfer By Natural Convection In Vertical Plates With Grooves	2015	Salman Mohammed Haider
			Saurav Dayanand
			Mohammed Sayfulla
2	Enhancing The Tribological Properties Of Lubricant Using TiO2 Nanoparticles	2015	Nishith
			Sanjay S
			Shareen Nikitha Dsouza
3	Effect Of Nano-TiO2 Loading On Mechanical, Thermal & Morphological Properties Of Nitrile Rubber Compounds	2014	Muhammed Javed
			Javad K T K
			Mohammed Rayees K
			Mohammed Ashar C
4	Study Of Solution Casted DNA-CTMA Based Nanomaterial Films	2014	Jilna Aravind
			Shaima Magdaline Dsouza
			Sushma.C
5	Equal Channel Angular Pressing Of Pure Aluminium	2013	Nashith Abdunnasir
			Rasheeque Rahman
			Sanjid P
			Shamsudheen
6	Analysis of Polymer Doped With Nano Particles	2013	Ayman Saeed
			Farusil Najeeb
			Mousim Mohammed
			Mohammed Zubair
7	Study & Analysis On Critical Radius & Crossover Radius Of Insulation For Various Heat Transfer Problem	2013	Navya Celine Lawrence
			Nikita Prabhakar Thakur
			Phaneendra K N
			Prinster Jason Lobo
8	Heat Transfer Enhancement Using Nanofluids - A Critical Study On Paradoxical Behaviour	2012	Mansoor A R
			Mohammed Adil
			Mohammed Shaheer
			Muhammed Thamees
9	Heat Transfer Characteristics Of A Nuclear Fuel Element Cooled In A Surrounding Medium - A Comparative Study Between 1-D & 2-D Analysis	2012	Fares Abdulla
			Mohammed Nazar
			Nageem Shafi
			Abdulla M.M
10	An Investigation On The Effect Of Nanoparticles On Time Response In	2011	Mishal Abdul Basheer
			Mohammed Vasil K

	Unsteady State Cooling		Mohammed Anas P
			Nabeel K
11	Comparison Of Heat Transfer Characteristics Of Rectangular & Cylindrical Fuel Elements & A Study On The Effect Of Cladding	2011	Amruth Raj M N
			Anoop P P
			Gajanan Mallya
			Geethesh
12	Heat Transfer Analysis of Nuclear Fuel Rods Having Non-uniform Energy Generation In Axial Direction	2010	Ashwin Shetty
			Mohammed Anees Ilyas
			Praneeth Maxim Noronha
			Sandesh B
13	Optimum Design Of Pin Fins Application In Electronic Cooling	2010	Mafeed.M.P
			Prabin Cheruvalath
			Salman Ali M
14	Thermal Analysis Of Rectangular Fin	2009	Abdul Jaleel E M
			Adarsh V
			Deepesh P
			Mohammed Thouseeq
15	Heat Transfer Analysis of Nuclear Fuel Rod	2009	Mohammed Tanzeeb
			Tanveer Shaikh
			Hisham Nisar Ahmed
			Nishan Nonda

Funds Received

- Received an amount of Rs 4,00000(Four Lacs) from VGST under SMYSR scheme for the set up of a Lab for the investigation of " Conjugate Heat Transfer Analysis of a Parallel Plate Channel with Volumetric Energy Generation" during 2014-2015 and the project ongoing.
- Received an amount of Rs 7, 00000(Seven Lacs) from AICTE under RPS scheme for the set up of a CFD Lab to for the investigation of "Heat and Fluid Flow Analysis of a Nuclear Fuel Element" during 2013-2014 and the project ongoing.
- Received an amount of Rs 50000 (Fifty Thousand) from P. A College of Engineering for the study on "Effect of Nanoparticles on Heat Transfer Enhancement in Various Heat Transfer Problems" during 2010-2011.

Labs Established under various funding schemes

- Nanotechnology Heat Transfer Laboratory
- Computational Lab
- Micro/Mini Channels Laboratory

Membership

- Life Member Institution of Engineers: M-188566-5
- Senior Member IACSIT:80340819

Awards Received

- The paper "Conjugate heat transfer analysis of a heat generating vertical plate" ,International Journal of Heat and Mass Transfer, Volume 50, Issues 1-2, January 2007, Pages 85-93 cited among the Top 25 Hottest Articles of Elsevier IJHMT during 2006

Short Term Courses and Workshops Attended

- National seminar on Institutional Development and Knowledge Networking, December 05, 2003NIT Calicut.
- AICTE-ISTE Short Term Training Program on Recent Trends in Thermal Design of Energy Systems, January 05-16 2004, NIT Calicut
- Judge at 2nd State Level Annual Convention of ISTE Students Chapter, Kerala Section, 20-21 February, 2004, MES College of Engineering, Kuttippuram Kerala.
- AICTE-ISTE Short Term Training Program on Recent Advances in Numerical Techniques to Solve Engineering Problems, March 08 -19 2004, NIT Calicut.
- XVII National Conference on I.C Engines and Combustion, December 18-20 2001, KREC Surathkal, Karnataka.
- Indo Swedish Workshop on Biofuel Conversion December 9-11 2003, IIT Madras.
- Short Term Training Program on Computer Programming and Scientific Computing, June 26-July 7, 2006, NIT Calicut.
- Workshop on Fuel Cells: Power Device of the Future, February 3-4 2006, IIT Kanpur
- Workshop on Research Methodology, October 17-18 2003, NIT Calicut
- Faculty Development Workshop on "Introduction to Research" January 24-25 2008 NIT Calicut
- TRANSEE
- Samvaad 2012 Infosys
- Leadership and Mentorig Skills
- Four days worksop on "Therapeutic Counselling",NMAMIT Nitte June 2-5 2014
- One Day Workshop on Montessori Training at Zyan International School Kannur
- Mastering the Art of Counselling (details to be added)
- Google Application workshop (details to be added)
- Collective Wisdom

Short Term Courses and Workshops Conducted

- FDP on Advances in CFD and Nanotechnology, 7- 9th April 2011, P. A College of Engineering, Sponsored by VTU-VGST (Govt. Of Karnataka)
- A Seminar on Diagnostic Techniques in Automotive Industry was conducted by Mr Shamnas, consultant to Automotive Industries on 5 November 2014. Session one was

conducted in the forenoon for final year students and in the afternoon slot for pre final year students.

- A three day workshop/Training on STAR CCM Software during 6th, 7th and 8th of January 2015 for pre final year and final year students. Students in large numbers actively participated for the training program.

- A two week certified training program on "CATIA-Version 5.0 – Basics, Designing, Modeling and Analysis" during January 1 -15, 2014 for pre final year and final year students.22 students participated in the training program

- TechXpo an Auto Engineering Show May 8th and 9th 2015(details to be added)

Countries Visited for Official/Academic Purposes

- Visited "University Sains Malaysia" Penang Malaysia on March 1, 2011, for the discussion on research collaborative possibilities.
- Visited Singapore during Feb 2011, to present a paper in International Conference on Mechanical Industrial and Manufacturing Technologies

Invited Talks

- Talk on "Igniting the Minds" at ATM Bhatkal on 30th March 2015.
- Talk on "Recent Trends in Thermal Design of Energy Systems, January 05-16 2004, NIT Calicut was delivered by Dr. Ramis M.K
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Details of Experiments/Computational projects added to teaching laboratories

- Determination of Thermal Conductivity of Nano Fluids
- Comparative Thermal Analysis of Circular and Rectangular Mini Channels
- Study on Heat Transfer by Natural Convection in Vertical Plates with Grooves
- Study on Heat Transfer of Dimpled Surfaces

Publications

International Conference Papers

1. Abdul Razak, Mohammed Sami, M.K. Ramis,"Numerical analysis of a rectangular plate cooled in a surrounding medium", *Proceedings of International Conference on Emerging Trends in Engineering Technology and Science (ICETETS)*, Tanjavur, 2016, pp.753-756.
2. A.R Shebeer, Muhammed Javed, Mohammed Rayees K, Jawad K T K, Mohammed Ashar and M.K. Ramis,"Effect of Nano-TiO2 Loading on Mechanical and Morphological Properties of Nitrile Rubber (NBR) Compounds", Proceedings of International Conference on Technological Advancements in Materials and Manufacturing for Industrial Environment (TAMMIE),Coimbatore,2016, pp. 3; ISBN 978-93-85477-74-4

3. M.K Ramis, **"**Temperature Dependent Investigation on Dynamic Viscosity of Graphite Nanoparticles Dispersed with EG**"** *Proceedings of the Second-Indo-Canadian Symposium on Nano Science and Technology (ICSNST),* National Institute of Engineering, Mysuru, India,2016, pp. 35.
4. A Mishal, M. K. Vasil, M. P. Anas, K Nabeel, M.K Ramis, Shabeer. Rahim, A. R. Faizabadi, Energy Enhancement using Nanofluids -A Study on Unsteady State Heat Transfer,*Proceedings of the 2ndInternational Conference on Renewable Energy: Generation and Applications* March 4-7, 2012 United Arab Emirates University, Al Ain, UAE,2012,pp.
5. M.P Mafeed, Salman Ali, C Prabin, M.K. Ramis, M.A Ali Baig, S.A Khan,"Optimum length for pin fin used in electronic cooling,", *Proceedings of the International Conference on Mechanical Industrial and Manufacturing Technologies*,Singapore, May 2011, pp. 593-597
6. Praneeth M.N, Anees M.I, Aswin S, Sandesh B and M.K Ramis,"Numerical Investigation on Heat Transfer Characteristics of a Nuclear Fuel Rods", *Proceedings of the 2010 International Conference on Mechanical and electrical Technology*,Singapore,2010,pp. 238-244.
7. M.K Ramis, Jahangeer, S, Jilani G.,"Numerical Analysis of a Nuclear Fuel Element Cooled in a Surrounding Medium**",***Proceedings of the 2nd International Conference on Thermal Engineering Theory and Applications*, Al Ain, United Arab Emirates,2005,pp.
8. M.K Ramis, Jahangeer.S, Jilani G,"Numerical Analysis of a Nuclear Fuel Element Cooled in a Surrounding Medium**",***Proceedings of the 2nd International Conference on Thermal Engineering Theory and Applications*, Al Ain, United Arab Emirates,2005,pp.
9. M.K Ramis and Jilani.G, " Heat transfer Characteristics of a Rectangular Fuel Element Cooled in the Surrounding Medium", *Proceedings of International Conference on Energy and Environment*, New Delhi, 2004,pp.63-69
10. M.K Ramis and Jilani, G, "Modeling and Simulation of a Rectangular Fuel Element Cooled in the Surrounding Medium", *Proceedings of International Conference on Energy and Environment*, New Delhi, 2004, pp.78-85.
11. M.K Ramis and Jilani,G,"Thermal Performance Characteristics of a Nuclear Fuel Element Dissipating Heat in a Surrounding Medium", *Proceedings of ESDA04 7th Biennial Conference on Energy Systems Design and Analysis, Manchester, United Kingdom,* 2004, pp.247-252
12. Labeeb A.B., Shameem.U, M.K Ramis., Jilani G., "Modeling and Simulation of Nuclear Fuel Rod Cooled by a Surrounding Fluid Medium" *Int. Conference on Theoretical, Applied, Computational and Experimental Mechanics*, IIT Kharagpur, India
13. M.K Ramis, and Jilani,G,"Modeling and Simulation of a Rectangular Fuel Element Cooled in the Surrounding Medium", *Proceedings of International Conference on Energy and Environment*, New Delhi, 2004,pp.78-85.
14. M.K Ramis, and Jilani,G, "Thermal Performance Characteristics of a Nuclear Fuel Element Dissipating Heat in a Surrounding Medium", *Proceedings of ESDA04 7th Biennial Conference on Energy Systems Design and Analysis,* Manchester, United Kingdom,2004 pp.247-252.

National Conferences

1. K.C Anish, S.M Thajuddeen, M.K Ramis, G Jilani., "Comparative Study of One and Two-dimensional Conduction Models of a Salt-gradient Solar Pond",*Proceedings ofInternational Conference On Recent Advances in Heat Transfer* ***(ICRAHT)***, Karunya University, Coimbatore**,**, India , 2006, pp.365-37.
2. Arees Qamareen, M.K Ramis, Chandrasekhar K.G and S.A Khan, "Control of Nozzle Flows under the Influence of Favorable Pressure Gradient", *Proceedings of National Conference on Advances in Mechanical Engineering AIM, 2005*, Hyderabad, India, 2005, pp. 128-132.
3. Ahmed Saleel, C and M.K Ramis, "Biodiesel-A Promising Alternative for India", *Proceedings of National Seminar on Trends in Energy Engineering and Manufacturing Technology*, Bhatkal, Karnataka, India, 2004, pp.
4. S.A Khan, Ahmed Saleel, C and M.K Ramis, "Flow and Noise Characteristics of Supersonic Jets", *Proceedings of National Symposium on Acoustics NSA2004*, Mysore, India Paper No. MA-03, 2004, pp. 1-10.

International Journals

1. **Asif Afzal**, Zahid Ansari, Ahmed Rimaz Faizabadi & M. K. Ramis, "Parallelization Strategies for Computational Fluid Dynamics Software: State of the Art Review", *Archives of Computational Methods in Engineering, Springer (**ISI Journal**)* - pp.1- 27. 2016, DOI 10.1007/s11831-016-9165-4.

2. Abdul Razak.R.K,Mohammed Sami.A.D and Ramis.M.K, "Thermal Performance Characteristics of Liquid Sodium as a Coolant Flowing Past a Rectangular Nuclear Fuel Element", International Journal of Nuclear Energy Science and Technology,Inderscience- **(Scopus Indexed Journal),** pp. 2016

3. Asif Afzal, Zahid Ansari, M. K Ramis , "On Parallelization of Computational Fluid Dynamics Software: A Survey of the State of the Art, ", Progress in Computation Fluid Dynamics, (Under Review)

4. K M Yashawantha**,** M K Ramis,Jawaz Pasha, "The Effect of Sonication Time on Alumina Nanofluids with Paradoxical Behavior*, ", Nano Trends: A Journal of Nanotechnology and Its Applications*, ISSN: 0973-418X, vol.16 no. 3, pp. 31-40, Jan 2014-15.

5. Abdul Rahiman, Abdul Razak.R.K, Mohammed Samee, M. K Ramis, "CFD Analysis of Flow Field in a Direct Injection Diesel Engine with Different Manifolds," American Journal of Fluid Dynamics, vol.4 no.3, pp. 102-113, 2014. DOI:10.5923/j.ajfd.20140403.03.

6. Abdul Razak.R.K,Mohammed Samee, and M. K Ramis, "A Study on Critical Radius and Crossover Radius of Insulation for Various Heat Transfer Problems, ", American Journal of Heat Transfer, Vol. 1 No. 3 pp. 149-156,2014, DOI:10.7726/ajhmt.2014.1012.

7. Mohammed Zubair, Farusil Najeeb, Mousim Mohamed, Ayman Saeed,Ramis M K, Abdul Mujeeb M S, B. K Sarojini,, "Analysis of Chitosan Polymer Doped with Nano Al_2O_3 and Nano CuO, ," American Journal of Polymer Science ,Volume 4, Number 2, pp:40-45,2014.

8. Nashith A., Sanjid P., Shamsudheen M., Rasheeque R., M. K Ramis, Shebeer A. R. **"**Effect of Equal Channel Angular Pressing (ECAP) on Hardness and Microstructure of Pure Aluminum**,"** International Journal of Materials Engineering Vol 4, no 3, pp: 119-122, 2014.

9. Mohammed Thamees, Mohammed Shaheer, Shebeer. A. Rahim, Jawaz Pasha, M. K. Ramis, **"**Heat transfer enhancement using alumina nanofluids effect of sonication time on unsteady cooling**,"** Nanoscience and Nanotechnology, Vol 3 ,no 3,pp: 40-47,2013.

10. Fares abdulla, Mohammed Nazar, Nageem Shafi, Abdulla M.,Abin Rasheed, M.K. Ramis, "Heat Transfer Characteristics of A Nuclear Fuel Rod Cooled In A Surrounding Medium –A Comparitive Study Between 1-D& 2-D Analysis,"International Journal of Engineering Science and Technology, Vol. 4 .no.10 , pp 4404-10,2012.
11. Ramis M.K, Jawaz Pasha, Shebeer A Rahim, "Heat Transfer Enhancement Using CuO Nanofluids -The Effect of Sonication Time on the Paradoxical Behaviour," International Journal of Engineering Science and Technology, Vol. 4 .no.7, pp 3514-3520.2012.
12. M.P Mafeed, Salman Ali M, Prabin C, M.K Ramis, M.A Ali Baig and S.A Khan, "Optimum Length for Pin Fins Used in Electronic Cooling," *Applied Mechanics and Materials*,ISSN: 0XXX-418X**(Scopus Indexed Journal),** vol. 110, no. 3, pp 1667-1673, March 2012 .

13. Waseem Ahmed, Suma Bhat, Mohammed Isham, Ramis M. K, Shamsheer Ahmed, "Pre-parallelization exercises in budget-constrained HPC projects: a case study in CFD," International Journal of Computer Applications (IJCA), Vol.1, pp. 93-95 2010.

14. M.K. Ramis, G. Jilani, " Heat and fluid flow characteristics of liquid sodium flowing past a nuclear fuel element with non-uniform energy generation," *International Journal of Heat and Mass Transfer, Elsevier* ISSN: 0017-9319 **(ISI Journal)**, vol. 53, no.9-10, pp. 1682-1690, April 2010, doi:10.1016/j.ijheatmasstransfer.2010.01.021
15. M.K. Ramis, G. Jilani, " Numerical study of a nuclear fuel element dissipating fission heat into its surrounding fluid medium," International Journal of Heat and Mass Transfer, **(ISI Journal)**, Vol 52, Issues 21-22, pp. 5005-5012. October 2009,
16. M.K. Ramis, G. Jilani, S. Jahangeer, "Conjugate conduction-forced convection heat transfer analysis of a rectangular nuclear fuel element with non-uniform volumetric energy generation, " International Journal of Heat and Mass Transfer**(ISI Journal)**, Vol 51, Issues 3-4, pp. 517-525. February 2008,

17. S. Jahangeer, M.K. Ramis and G. Jilani, Conjugate heat transfer analysis of a heat generating vertical plate ,International Journal of Heat and Mass Transfer, **(ISI Journal)**, Vol 50, Issues 1-2, Pages 85-93 ,January 2007,
18. M.K. Ramis, G. Jilani, Heat transfer analysis of rectangular fuel element cooled in surrounding medium, *Energy Heat and Mass Transfer* ISSN: 00XX-1234 **(Scopus Indexed Journal)**, vol. 29, pp. 271-288. April 2007

Reviewer
ASME Conferences and Elsevier Journals

Examiner (Ph D)

AMU Aligarh, USM Malaysia