

TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type A post-doc fellowship

Gopikrishnan Chirappurathu Remesan CURRICULUM VITAE

PERSONAL INFORMATION

Surname	Chirappurathu Remesan
Name	Gopikrishnan
Date of birth	26, May, 1992

PRESENT OCCUPATION

Appointment	Structure
Institute Post-doctoral fellow	July 2021 - January 2022 (6 months and extendable up to one year)
	Dept. of Mathematics, Indian Institute of Technology Bombay, India

EDUCATION AND TRAINING

Degree	Course of studies	University	Year of achievement of the degree
Degree	Integrated BS-MS Dual Degree (This is an integrated Bachelor of Science - Master of Science course with a five year duration including a one year research project.)	Indian Institute of Science Education and Research Thiruvananthapuram, Kerala, India	May 31, 2015
PhD	PhD in Mathematics Thesis title: Modelling and numerical analysis of complex tumour growth problems [Item 21 in Enclosures]	IITB-Monash Research Academy, Mumbai, Maharashtra, India	August 7, 2021
	Advisors: Prof Neela Nataraj (IIT Bombay), Prof Jerome Droniou (Monash University) and A/Prof Jennifer Flegg (University of Melbourne)	(This is a joint research school between IIT Bombay, India and Monash University, Australia)	



REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of registration	Association	City
August 2018	(a) The Australian Mathematical Soceity(b) The Australian and Newzealand Industrial and Applied Mathematics	Melbourne, Australia

FOREIGN LANGUAGES

Languages	Level of knowledge
English	Professional and fluent

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2010 - 2015	INSPIRE (Innovation in Science Pursuit for Inspirational Research) Fellowship
	(Department of Science and Technology, Government of India)
	Registration Number - DST/INSPIRE-SHE/IISER-T/2008
2015	Institute Silver Medal, For best academic performance and highest cumulative grade
	point average, School of Mathematics, IISER Thiruvananthapuram, Kerala, India.
2020	First prize, Three Minute Thesis Talk, IITB - Monash Research Academy.
2021	Prof. Prabhulal Bhatnagar Memorial Prize for the best thesis in the areas of fluid
2021	mechanics and applied mathematics from Dept. of Mathematics, IIT Bombay.

TRAINING OR RESEARCH ACTIVITY

- Winter School in Proability (December 2012) Indian Statistical Institute Kolkata, West Bengal, India. [Item 10 in Enclosures]
- 2. Refresher course for college teachers in Kerala State at Kerala School of Mathematics, Kozhikode, Kerala, India. *[Item 11 in Enclosures]*
- 3. Workshop (Ferbuary 2020) Monash Workshop on Numerical Differential Equations and Applications, Monash University, Australia. *[Item 12 in Enclosures]*
- 4. Academic visit (June 2019) Mathematical Institute, The University of Oxford. The goal of this two week visit was to engage in a research collaboration on a stress dependent tumour growth model with Prof Helen Byrne. *[Item 7 in Enclosures]*
- 5. Workshop (August 2019) -Systems of conservation laws Theory and Numerics, TIFR-CAM, Bangalore, Karanataka, India. *[Item 14 in Enclosures]*

PROJECT ACTIVITY

Year	Project
2015	Master of Science

Università degli Studi di Milano - Divisione Stipendi e Carriere del Personale Ufficio Contratti di formazione e Ricerca Via Sant'Antonio 12 - 20122 Milano, Italia Assegni.postdoc@unimi.it



	Title: A theoretical and numerical study of stochastic delay integro-differential
	equations
	Advisor: Prof M. P. Rajan, Professor, School of Mathematics, IISER
	Thiruvananthapuram, Kerala, India.
2045	Master of Science (for minor degree in physics)
2015	Title : Universal behaviour of quantum discord as a function of measurement strength
	Advisor: Prof Anil Shaji, Professor, School of Physics, IISER Thiruvananthapuram, In-
	dia.
2012	Student research associate
2012	Title: Investigation into the thermo-oxidative and mechanical response of
	commercial polyimide resins and polyimide nano-composites for aerospace
	application [Item 9 in Enclosure]
	Advisor: Prof Sumit Basu, IIT Kanpur, Kanpur, Uttar Pradesh, India.
2012	Bachelor of Science
2012	Title: Electronic structure, lattice energies and Born exponents for al-
	kali halides from first principles, AIP Advances, 2(1), 2012, URL
	https://doi.org/10.1063/1.3684608.
	Advisor: Prof Ayan Datta, Professor, Indian Association for the Cultivation of
	Sciences, Kolkata, India

CONGRESSES AND SEMINARS

Date	Title	Place
November 2018	Computational Techniques and Applications Conference Title of the talk: 'Numerical solution of the two-phase tumour growth model with moving boundary (1-spatial dimensional study)'	Newcastle, Australia.
June 2019	Mathematics of Finite Elements and Applications – 2019 Title of the talk: 'Numerical solution of a two-phase tumour growth model in two spatial dimensions' [Item 13 in Enclosures]	Brunnel University, London, England
February 2020	Annual conference of ANZIAM 2020 Title of the talk: <i>'Numerical solutions of a two-dimensional</i> <i>tumour growth model'</i> [Item 19 in Enclosures]	Sydney, Australia
February 2020	Monash Workshop on Numerical Differential Equations and Applications Title of the talk: 'Convergence analysis of a two-phase tumour growth model' [Item 12 in Enclosures]	Monash University, Australia
January 2021	Annual conference of Australian Mathematical Society Title of the talk: <i>Numerical solution of a tumour growth model in</i> <i>two spatial dimensions</i> '	Online
February 2021	Annual conference of Australian and New Zealand Industrial and Applied Mathematics	Online



Title of the talk: 'Two-phase model for compressive stress	
induced on a surrounding hyperelastic medium by an expanding	
tumour'	

PUBLICATIONS

Articles

G. C. Remesan. Strong bounded variation estimates for the multi-dimensional finite volume approximation of scalar conservation laws. *ESAIM:M2AN*, 55(4), 2021. URL https://doi.org/10.1051/m2an/2021027.

J. Droniou, N. Nataraj, and G. C. Remesan. Convergence analysis of a numerical scheme for a tumour growth model. *IMA Journal of Numerical Analysis*, 2021. URL https://doi.org/10.1093/imanum/drab016.

J. Droniou, J. Flegg, and G. C. Remesan. Numerical solution of a two dimensional tumour growth model with moving boundary. *Journal of Scientific Computing*, 85(20), 2020. URL https://doi.org/10.1007/s10915-020-01326-6.

Congress proceedings

G. C. Remesan. Numerical solution of the two-phase tumour growth model with moving boundary. In B. Lamichane, T. Tran, and J. Bunder, editors, *Proceedings of the 18th Biennial Computational Techniques and Applications Conference , CTAC-2018*, volume 60 of *ANZIAM J.*, pages C1–C15, 2019. URL https://doi.org/10.21914/anziamj.v60i0.13936.

OTHER INFORMATION

Experience

- (1) June 2015 July 2016: Visiting Lecturer, Bishop Chulapparambil Memorial College Kottayam, Kerala, India. [Item 8 (experience certificate) in Enclosures]
- (2) April 2021 June 2021: Research associate, Dept. of Mathematics, Indian Institute of Technology Bombay, Maharashtra, India. [Item 18 (offer letter) in Enclosures]

National level post graduate examinations

- (1) Junior Research Fellowship and Eligibility of Lectureship (20-12-2015) conducted by Council of Scientific and Industrial Research, Govt. of India. *[Item 14 in Enclosures]*
- (2) Junior Research Fellowship and Eligibility of Lectureship (20-6-2015) conducted by Council of Scientific and Industrial Research, Govt. of India. *[Item 15 in Enclosures]*
- (3) Graduate Aptitude Test in Engineering (Mathematics) conducted by Ministry of Human Resource Development, Govt. of India. (Rank 104/6305) *[Item 16 in Enclosures]*

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Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR



n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Place and date: Mumbai, India, 27th August 2021

SIGNATURE 27/08/2001