# KARPAGAM UNIVERSITY COIMBATORE

## ACADEMIES' LECTURE WORKSHOP

## "ALGEBRA AND ANALYSIS" HELD ON JANUARY 4TH AND 5TH, 2017 ACADEMIC REPORT BY THE CORDINATOR

Sponsored by

IASc-INSA-NASI Joint Science Education Panel



Indian Academy of Sciences (IAS), Bangalore, Indian National Science Academy (INSA), New Delhi and Indian National Academy of Sciences (INAS), Allahabad

Sponsored Amount Rs.**1,38,00** 

Organizational information

Co-ordinator: M. Jegannathan, Assistant Professor, Department of Mathematics, Coimbatore

Convener: K. N. Raghavan (FASc, FNASc), Professor, Institute of Mathematical Sciences, Chennai

Venue: Karpagam University, Coimbatore

Dates: Thursday and Friday, 4th and 5th January, 2017

Participation: There were totally 156 participants: 80 under graduates, 22 post graduate students, 42 research scholars, and 12 faculties (assistant professors).

## Topics covered

- 1. Uniform continuity and uniform convergence by S. Kesavan (FNASc, FASc) of 11T Madras
- 2. Group actions and applications by D. S. Nagaraj (FASc, FNASc, FNA) of IMSc
- 3. Two applications of linear algebra by K. N. Raghavan (FASc, FNASc) of IMSc.

Time table. There were eight sessions over the two days, each of about eighty minutes duration. Six of these sessions were devoted to lectures, two each by each of the three speakers listed above. The last session on both days was devoted to "discussion and problem solving" and conducted jointly by all the speakers.

Conclusion. Given the torpid state of mathematics education at most colleges and universities of the country, it is only through such workshops as these that the hordes of students enrolled in courses at these colleges and universities can awaken to the sense of joy and adventure that accompany mathematical pursuits.

## Coordinator

M. JEGANATHAN Assistant Professor, Department of Mathematics Karpagam University, Coimbatore-641021

M.M. Shapringe

Head of the Department



# KARPAGAM UNIVERSITY

Eachanari Post, Coimbatore - 641 021, Tamil Nadu, India.

# **Department of Mathematics**

Two day Science Academics Lecture Workshop on

# "Algebra and Analysis"

Venue: Pharmacy Hall



Inaugural Function Two Day Science Academics Lecture Workshop on Algebra and Analysis-04.01.2017



Key Note Address by Dr. S. Kesavan Two Day Science Academics Lecture Workshop on Algebra and Analysis-05.01.2017

## KARPAGAM UNIVERSITY NARPAGAM ACADEMY OF HIGHER EDUCATION Department of Mathematics Science Academies' Lecture workshop on "Algebra and Analysis" 4<sup>th</sup> – 5<sup>th</sup> January, 2017

REGISTRATION FORM

Name

Program & Branch

Designation

Institution Institutional Address (Telephone, e-mail)

Residential Address (Telephone, e-mail)

Contact Phone No. E-mail ID Mobile No.

Date: Place:

Signature of the participant

# Convener

Prof. K. N. Raghavan (FASc, FNASc)

Institute of Mathematical Sciences CIT Campus, Taramani Chennai - 600 113. E-mail: knr@imsc.res.in Phone: +91 94456 31505, 044-2254 3264

### Coordinator

M. JEGANATHAN Assistant Professor Department of Mathematics Karpagam University Coimbatore-641021, Tamilnadu

### Venue of the workshop

Bharathi Hall, Karpagam University, Eachanari -Post, Pollachi Main Road, Coimbatore - 641 021.

### Who should attend the workshop?

Students undergoing B.Sc., / M.Sc., / M.Phil., / Ph.D. in Mathematics degree from recognized institutions and Faculties.





Science Academies' Lecture Workshop on Algebra and Analysis

4<sup>th</sup> - 5<sup>th</sup> January, 2017

Organized by Department of Mathematics



#### KARPAGAM ACADEMY OF HIGHER EDUCATION

(Deemed University, US 3 of UGC Act, 1956) Coimbatore – 641 021, Tamil Nadu, India Phone: 0422 647 1113, 114, 115 Website: www.kahedu.edu.in

Sponsored by IASc-INSA-NASI Joint Science Education Panel



#### KARPAGAM UNIVERSITY

Karpagam University is located in a sprawling, green, lush campus extending 26 acres. It has emerged from Karpagam Arts & Science College (Autonomous) a unit under the Karpagam Charity Trust established in 1989 founded by the great philanthropist and educationist Dr.R.Vasanthakumar with the vision of instilling originality in the learning minds, impart quality and valuebased education and engage in Research and Development with the noble objective of creating unique men and women to serve and lead in society.

Karpagam University- Karpagam Academy of Higher Education was conferred deemed University status by the Ministry of Human Resource Development in August 2008 under section 3 of the UGC Act 1956. It is a member of the Association of Indian Universities. The University has been accredited by the NAAC in 2015. The University has 4 Faculty - Faculty of Arts, Sciences and Humanities, Faculty of Engineering, Faculty of Architecture and Faculty of Pharmacy. It has 25 Departments offering a wide range of 78 academic programmes from graduation to doctorate levels.

We have got good number of research projects with financial support from various funding agencies like DBT/ DST/ ICMR and have filed more than 41 patents. As many as 1600 Research papers have been published by the faculty in SCOPUS and Peer Reviewed Journals. The University has entered collaboration with foreign Universities, Industries and Research bodies for the benefits of the students.

#### The Department

The Department of Mathematics at Karpagam University offers full time B.Sc, M.Sc., M.Phil. and Ph.D. programs in Mathematics. It is committed to impart quality education through well qualified and experienced faculty members and promotes the growth of effective, efficient, true professionals and tune them to the requirements of the challenging corporate world.

#### Workshop

The workshop will cover topics in Algebra and Analysis. The resource persons will concentrate on some basics that UG and PG Mathematics students should know but are typically not emphasized in the traditional coursework.

### Science Academies

Indian Academy of Sciences (IAS), Bangalore founded in 1943 by Sir C.V.Raman, aims at promoting the progress and upholding the cause of science in the pure and applied branches. Its major activities include publication of scientific journals with special volumes, by the recognition of scientific talent for the improvement of science education. As part of the science education programmes, the Indian Academy of Sciences in Bangalore in association with the Indian National Science Academy (INSA), New Delhi and Indian National Academy of Sciences (INAS), Allahabad organize programmes for the improvement of science education in the Universities and Colleges throughout the country.

#### Registration

There is NO registration fee to attend this lecture workshop. Tea and Lunch will be served to the participants. Totally only 150 participants will be permitted and registration is done on the basis of "First comes First Served". No spot registration. Those who wish to participate in the lecture workshop should send the filled registration form on or before 28<sup>th</sup> December, 2016 to the coordinator' address or mail id given below.

#### M.Jeganathan,

Coordinator - Science Academies' Lecture workshop on "Algebra and Analysis" Department of Mathematics Karpagam University, Eachanari (Post), Pollachi Main Road, Coimbatore-641021, Tamil Nadu, India. E-mail: jeganathan.m@kahedu.edu.in (or) mjegannathan@gmail.com; Phone: +91-9944733373.

### Workshop Schedule

Day 1: 4 <sup>th</sup> January, 2017 (Wednesday)			
09.00 - 09.15 an	n : Registration		
	n : Inauguration		
DURATION	SPEAKER	TITLE	
1	Prof. S.Kesavan	Uniform Continuity	
09.30 to 11.00	(FASc, FNASc)	and Uniform	
	IIT, Chennai.	Convergence	
11.00 to 11.30	TEA BREAK		
11.30 to 13.00	Prof. D.S.Nagaraj	Groups and group actions	
	(FASc, FNASc)		
	Institute of		
	Mathematical		
1 13	Sciences, Chennai.		
13.00 to 14.00	LUNCH BREAK		
14.00 to 15.30	Prof. K.N.Raghavan	Basics and	
	(FASc, FNASc)		
	Institute of	applications of linear algebra and	
	Mathematical	matrix analysis	
	Sciences, Chennai.	matrix analysis	
15.30 to 16.00	TEA BREAK		
16.00 to 17.15	Tutorial and Discussion		
Day 2:	5th January, 2017 (Thursday)		
d y	Prof. S.Kesavan	Applications of	
09.30 to 11.00	(FASc, FNASc)	differentiability, and	
1 st -	IIT, Chennai.	integrability	
11.00 to 11.30	TEA BREAK		
1	Prof. D.S.Nagaraj	Applications of group actions	
And and	(FASc, FNASc)		
11.30 to 13.00	Institute of		
	Mathematical	group actions	
	Sciences, Chennai.		
13.00 to 14.00	LUNCH BREAK		
1.1	Prof. K.N.Raghavan	Linear Algebra	
14.00 to 15.30	(FASc, FNASc)	applications to	
	Institute of	network flows and	
	Mathematical	line of least squares	
15.00	Sciences, Chennai.		
15.30 to 16.00		BREAK	
16.00 to 17.15	Tutorial and Discussion		
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