



KARPAGAM ACADEMY OF HIGHER EDUCATION
(Deemed to be University)
(Established Under Section 3 of UGC Act, 1956)
Eachanari Post, Coimbatore-641021, Tamilnadu, India.

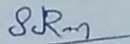
FACULTY OF ARTS, SCIENCE AND HUMANITIES
DEPARTMENT OF CHEMISTRY

Coimbatore
03.01.2019

DEPARTMENT OF CHEMISTRY

Coaching for competitive examinations-Internal Circular

Coaching classes for competitive examinations (CSIR-NET) will be conducted for the II M.Sc students in our department as per the following schedule. All the students are advised to attend the classes without fail and make use of it.


Signature of HoD

Schedule

Description of Competitive Examination	CSIR- NET
Academic year	2018-2019
Semester	IV
Scheduled Hours / Semester	10 hours/week
Number of Students Enrolled	25
Name of the agencies involved	Karpagam Academy of Higher Education, Coimbatore
Faculty / Resource persons with address	1. Dr. S. Ravi 2. Dr. A. Thangamani 3. Dr. K. Sundaram 4. Dr. M. R. Ezhilarasi
Date, Time and Venue	Date : Started from 08.01.2019 Time : 3.30-4.30 pm Venue : E. 402

Invitation



Karpagam Academy of Higher Education

(Deemed to be University)

(Established Under Section 3 of UGC Act, 1956)

DEPARTMENT OF CHEMISTRY

Cordially invites you for the

CSIR-NET Coaching class

From 08.01.2019 onwards

Faculty In-Charge

Dr.S.Ravi

Professor & Head, Department of Chemistry, KAHE

Dr.A.Thangamani

Associate Professor, Department of Chemistry, KAHE

Dr.M.R.Ezhilarasi

Associate Professor, Department of Chemistry, KAHE

Dr.K.Sundaram

Assistant Professor, Department of Chemistry, KAHE

Time: 3.30 - 4.30 pm.

Venue: E-402

Bio data of the Faculties



KARPAGAM ACADEMY OF HIGHER EDUCATION COIMBATORE - 641 021

BIODATA

1. Name of the Faculty : Dr.S.Ravi
 2. Designation : Professor & Head
 3. Department : Chemistry
 4. Date of Birth : 31-05-1963 Age : 54
 5. Gender : Male
 6. Religion : Hindu
 7. Community : BC Caste: Badagar
 8. Date of Joining : 09-06-2008
 9. Residential Address : Dr.S.Ravi,
 TF-07-Sowparnika Saigopal Apartments
 Kavetty layout, Chandragandhi Nagar
 Sowripalayam, Coimbatore.

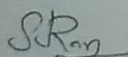


10. Mobile No. : 9047174142 PAN No. ADYPR1656E
 11. E-mail ID : ravisubban@rediffmail.com
 12. Qualification :

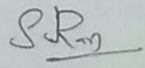
Sl.No.	Degree	Subject	University	Class	Year of Passing
1.	Ph.D	Chemistry of Natural Products	Bharathiar University	-	1992
2	M.Phil	-	-	-	-
3.	PG	Chemistry	Bharathiar University	I	1986
4.	UG	Chemistry	Madras University	I	1983
5	+2	English, Tamil, Physics, Chemistry, Maths and Biology	Tamil Nadu State Board	I	1980
6	10 th	English, Tamil, Maths, Science & History & Geography	Tamil Nadu State Board	I	1978
7	SLET/NET	-	-	-	-
8	Others	-	-	-	-

13. Teaching Experience (in years) : KAHE : 9 years Others : 16 years
 14. Industrial Experience (in years) : 16
 15. No. of Publications : International: 47 National : 12
 16. No. of Papers Presented : International: 3 National : 6

17. No. of Conference/Seminars attended : 10
 18. Details of Research Grants / Projects received : DST, Rs.38,00,000, 3 years duration
 19. Patents (if any) : Filed-4
 20. Person with Disability : Not applicable
 (if YES, attach certificate)



HOD


 Signature of the Faculty

DEAN



KARPAGAM ACADEMY OF HIGHER EDUCATION COIMBATORE - 641 021

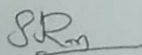
BIODATA

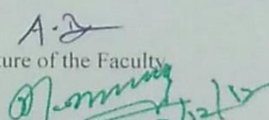


1. Name of the Faculty : Dr.A.Thangamani
2. Designation : Assistant Professor
3. Department : Chemistry
4. Date of Birth : 15-05-1981 Age: 36
5. Gender : Male
6. Religion : Hindu
7. Community : MBC Caste: Vettuva Gounder
8. Date of Joining : 02-09-2010
9. Residential Address : S/o K.R.Arumugam, K.Pudukkottai (Post),
Reddiarchatram (Via), Dindigul (Dt) - 624622
10. Mobile No. : 9345496093 Pan No.:AJNPT3107D
11. E-mail ID : thangabell2003@yahoo.co.in
12. Qualification : M.Sc. M.Phil, Ph.D

Sl.No.	Degree	Subject	University	Class	Year of passing
1.	Ph.D	Chemistry	Annamalai University	-	2009
2.	M.Phil	Chemistry	Madurai Kamaraj University	First	2005
3.	PG	Chemistry	Madurai Kamaraj University	First	2003
4.	UG	Chemistry	Madurai Kamaraj University	First	2001
5.	+2	Tamil, English, Maths, Physics, Chemistry & Biology	BHSE	First	1998
6.	10	Tamil, English, Maths, Science & Social Science	BSE	First	1996
7.	SLET/ NET	-	-	-	-
8.	GATE	Chemistry	Conducted by IIT Delhi	84.76 Percentile	2004

13. Teaching Experience (in years) : University : 7Years 03 Months College: Nil
14. Industrial Experience (in years) : 1 Yr 2 Month
15. No. of Publications : International:23 National: Nil
16. No. of Paper Presented : International: 01 National: 07
17. No. of Conference/Seminars attended : 16
18. Details of Research Grants / Projects, : DST-SERB Project, File No.SR/S-1/OC-28/2011, Amount: Rs.38, 00,000/-.
(Co-Principal Investigator)
19. Patents (if any) : Nil
20. Person with Disability (if YES, attach Certificate) : Not applicable


HOD


Signature of the Faculty
DEAN

BIODATA



Name of the Faculty : Dr.M.R.Ezhilarasi
Designation : Assistant Professor
Department : Chemistry
Date of Birth : 13-02-1982 Age : 32
Gender : Female
Religion : Hindu
Community : MBC Caste: Vanniya kula shaktriyar
Date of Joining : 12-08-2011
Residential Address : M.R.Ezhilarasi
W/o R.Ezhilmaran, 57 Thiruvalluvar street,
Rajendracholagan, Kattumannar koil TK, Cuddalore Dt

10. Mobile No. : 9865436611 PAN No: ABCPE9849G

11. E-mail ID : mrezhilarasi@gmail.com

12. Qualification :

Sl.No.	Degree	Subject	University	Class	Year of Passing
1.	Ph.D	Organic Chemistry	Annamalai University	-	2011
2	M.Phil	Chemistry	Annamalai University	I	2006
3.	PG	Chemistry	Annamalai University	I	2004
4.	UG	Chemistry	Bharathidasan University	I	2002
5	+2	English, Tamil, Physics, Chemistry, Maths and Biology	Tamil Nadu State Board	I	1999
6	10 th	English, Tamil, Maths, Science & History & Geography	Tamil Nadu State Board	I	1997
7	SLET/NET	-	-	-	-
8	Others	-	-	-	-

13. Teaching Experience (in years) : University: 3.3 Years College: Nil

14. Industrial Experience (in years) : -

15. No. of Publications : International: 11 National :-

16. No. of Papers Presented : International: - National :-

17. No. of Conference/Seminars attended : 8

18. Details of Research Grants / Projects received: Nil

19. Patents (if any) : 2

20. Person with Disability : Not applicable
(if YES, attach certificate)

BIODATA

1. Name of the Faculty : Dr. K. Sundaram
2. Designation : Assistant Professor
3. Department : Chemistry
4. Date of Birth : 16.04.1986 Age : 30
5. Gender : Male
6. Religion : Hindu
7. Community : MBC
8. Date of Joining : 16.07.2013
9. Residential Address : 4/261, Morasuppatti (Vil), Mukkulam (Po),
Palacode (Tk), Dharmapuri (Dt) - 635111.
10. Mobile No. : +91 9659373414; Pan Id: GRMPS4053N
11. E-mail ID : sundarg2010@gmail.com
12. Qualification : M.Sc., Ph.D.



S.No.	Degree	Subject	University	Class	Year of Passing
1	Ph.D	Synthetic Organic Chemistry	Karpagam University	-	2014
2	PG	General Chemistry	Bharathiar University	First	2010
3	UG	General Chemistry	Bharathiar University	Second	2008
4	+2	Mathematics, Physics, Chemistry and Biology	BHSE	First	2004
5	10 th	Tamil, English, Mathematics, Science and Social science	BSE	First	2001
6	SLET /NET	-	-	-	-

13. Teaching Experience (in years) : University : 3 years,
College : Nil
14. Industrial Experience (in years) : Nil
15. No. of Publications : International: 7
National: 1
16. No. of Papers Presented : International: 2
National: 1
17. No. of Conference/Seminars attended : 4
18. Details of Research Grants / Projects received: Nil
19. Patents (if any) : Nil
20. Person with Disability : NA
(if YES, attach certificate)

Syllabus

CSIR-UGC National Eligibility Test (NET) for Junior Research Fellowship and Lecturer-ship

SYLLABUS FOR CHEMICAL SCIENCES PAPER I AND PAPER II

Physical Chemistry:

1. Basic principles and applications of quantum mechanics – hydrogen atom, angular momentum.
2. Variational and perturbational methods.
3. Basics of atomic structure, electronic configuration, shapes of orbitals, hydrogen atom spectra.
4. Theoretical treatment of atomic structures and chemical bonding.
5. Chemical applications of group theory.
6. Basic principles and application of spectroscopy – rotational, vibrational, electronic, Raman, ESR, NMR.
7. Chemical thermodynamics.
8. Phase equilibria.
9. Statistical thermodynamics.
10. Chemical equilibria.
11. Electrochemistry – Nernst equation, electrode kinetics, electrical double layer, Debye-Hückel theory.
12. Chemical kinetics – empirical rate laws, Arrhenius equation, theories of reaction rates, determination of reaction mechanisms, experimental techniques for fast reactions.
13. Concepts of catalysis.
14. Polymer chemistry. Molecular weights and their determinations. Kinetics of chain polymerization.
15. Solids - structural classification of binary and ternary compounds, diffraction techniques, bonding, thermal, electrical and magnetic properties
16. Collids and surface phenomena.
17. Data analysis.

Inorganic Chemistry

1. Chemical periodicity
2. Structure and bonding in homo- and heteronuclear molecules, including shapes of molecules.
3. Concepts of acids and bases.
4. Chemistry of the main group elements and their compounds. Allotropy, synthesis, bonding and structure.
5. Chemistry of transition elements and coordination compounds – bonding theories, spectral and magnetic properties, reaction mechanisms.
6. Inner transition elements – spectral and magnetic properties, analytical applications.

7. Organometallic compounds - synthesis, bonding and structure, and reactivity. Organometallics in homogenous catalysis.
8. Cages and metal clusters.
9. Analytical chemistry- separation techniques. Spectroscopic electro- and thermoanalytical methods.
10. Bioinorganic chemistry – photosystems, porphyrines, metalloenzymes, oxygen transport, electron- transfer reactions, nitrogen fixation.
11. Physical characterisation of inorganic compounds by IR, Raman, NMR, EPR, Mössbauer, UV-, NQR, MS, electron spectroscopy and microscopic techniques.
12. Nuclear chemistry – nuclear reactions, fission and fusion, radio-analytical techniques and activation analysis.

Organic Chemistry

1. IUPAC nomenclature of organic compounds.
2. Principles of stereochemistry, conformational analysis, isomerism and chirality.
3. Reactive intermediates and organic reaction mechanisms.
4. Concepts of aromaticity.
5. Pericyclic reactions.
6. Named reactions.
7. Transformations and rearrangements.
8. Principles and applications of organic photochemistry. Free radical reactions.
9. Reactions involving nucleophilic carbon intermediates.
10. Oxidation and reduction of functional groups.
11. Common reagents (organic, inorganic and organometallic) in organic synthesis.
12. Chemistry of natural products such as steroids, alkaloids, terpenes, peptides, carbohydrates, nucleic acids and lipids.
13. Selective organic transformations – chemoselectivity, regioselectivity, stereoselectivity, enantioselectivity. Protecting groups.
14. Chemistry of aromatic and aliphatic heterocyclic compounds.
15. Physical characterisation of organic compounds by IR, UV-, MS, and NMR.

Interdisciplinary topics

1. Chemistry in nanoscience and technology.
2. Catalysis and green chemistry.
3. Medicinal chemistry.
4. Supramolecular chemistry.
5. Environmental chemistry.

Students Name list

Class : II-M.Sc., Chemistry

Sem/ Year : IV/ II

Batch : 2018-2019

S.NO	REG.NO	STUDENT NAME
1.	18CHP001	Abinaya M.C
2.	18CHP004	Archana.S
3.	18CHP006	Brindha.S
4.	18CHP008	Drishya.D.Nair
5.	18CHP009	Elayaraja.S.M
6.	18CHP010	Gowtham.M
7.	18CHP011	Haritha.H.Nair
8.	18CHP012	Harshini.M
9.	18CHP016	Karthick.V
10	18CHP017	Karthika.N
11.	18CHP019	Karuppusamy.S
12.	18CHP020	Kavin.S
13.	18CHP021	Kaviyarasan.S
14.	18CHP022	Koushika.J
15.	18CHP023	Kowsalya.N
16.	18CHP024	Krishnamoorthy.K
17.	18CHP038	Prince Raja.A
18.	18CHP039	Rajesh.G.M
19.	18CHP042	Renjima Nair
20.	18CHP043	Riyas.S
21.	18CHP050	Shubapriya.G.M
22.	18CHP051	ShuhailIrrfanAhamed.J
23.	18CHP052	Sobana.T

24.	18CHP055	Sruthi.R
25.	18CHP056	Stalin Jegathisraj.A



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**FACULTY OF ARTS, SCIENCE AND HUMANITIES
DEPARTMENT OF CHEMISTRY**

Report on CSIR -NET class

Department of Chemistry organized a CSIR-NET coaching class for M.Sc Chemistry students. The classes were handled by our faculties, namely Dr.S.Ravi, Dr.A.Thangamani, and Dr.M.R.Ezhilarasi and Dr.K.Sundaram after working hours from 3.30 to 4.30pm. The classes commenced from 08.01.2019. 25 students were actively attended the class. The students are taught with important equations and topics necessary for CSIR -NET.

HEAD OF THE DEPARTMENT



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FACULTY OF ARTS, SCIENCE AND HUMANITIES
DEPARTMENT OF PHYSICS

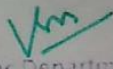
Date: 11.2.2019

Circular

This is to inform you that, as a part of student support, Department of Physics is organizing **Career Guidance** classes to our III B.Sc and II M.Sc Physics students, given by **Dr. M. Kanagaraj**, Assistant Research Faculty, School of Electronic Science and Engineering Nanjing University, P.R.China on 14.2.2019 about research progress. Students are requested to attend the class without fail.

Venue: MBA Seminar Hall

Time: 1.30 – 3.30 pm


Head of the Department
Department of Physics
Faculty of Arts, Science and Humanities
Karpagam Academy of Higher Education
Coimbatore – 641 021, Tamil Nadu, India

Invitation



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Eachanari Post, Coimbatore-641021, Tamil Nadu, India.

DEPARTMENT OF PHYSICS

Cordially invites you for the
Career Guidance Program

On

Guidance to Research

On 14th February 2019

Chief Guest

Dr.M.Kanagaraj

Assistant Research Faculty

School of Electronic Science and Engineering

Nanjing University, P.R.China

VENUE: MBA Seminar Hall

TIME: 1.30 – 3.30 PM

ALL ARE INVITED

Dr.V. Senthil Kumar

Head, Department of Physics

CURRICULAM VITAE

Dr. M. Kanagaraj, MSc, MPhil, PhD

PGDCA, CLP

Ramalingam Hospital Back side
S.Papparapatty (PO), Attayampatty
Salem -637501
TamilNadu, India
E – mail: kanaguphy@gmail.com,
Mobile No: +91-9789268828

Academic / Professional details:

Degree/ Position	University/Institution	Year of Passing	Subjects	Class / Grade Obtained
Postdoctoral Research Associate	NCU, JNCASR, Bangalore	Jan 2, 2017	Research	
Assistant Professor	Karpagam University Pollachi Main Road, Eachanari post Coimbatore – 641 021	Since 2015	Teaching and Research	
Research Associate	Department of Chemistry, Indian Institute of Technology, Delhi	Since September to December 2014		
Ph.D	Bharathidasan University, TN, India	July 2009 to 2014	Physics	Thesis (highly commended)
M.Phil	Periyar University, TN, India	April - 2009	Physics	I
M.Sc	Periyar University, TN, India	April – 2008	Physics	I (Uni.Rank holder)
B.Sc	Govt. Arts. College, Rasipuram, TN, India	April - 2005	Physics	I (Uni.Rank holder)

Special Awards / Honors:

1. Global Achievers Award from the Indian Institute of Oriental Heritage on February 22nd, 2015 at 38th Annual International Conference on Oriental Heritage, Newdelhi.
2. Young Researcher Award in NCNP-2014, School of Physics, Bharathidasan University, Tiruchirappalli, TamilNadu, India.
3. Asian Admiral Achievers in 2013 from Rifacimento International Reference Publishers, New Delhi, India.
4. Young Researcher Award in NCAMA-2013, National Institute of Technology, Trichy, TamilNadu, India.
5. Council of Scientific and Industrial Research (CSIR), New Delhi, India - Senior Research Fellow (SRF) since April - 2012 to 2014.
6. Reviewer in Applied Physics Letters (APL) and Journal of Applied Physics (JAP) (American Institute of Physics) since 2012.
7. Junior Research Fellow (JRF) from 2009 to 2011 in Department of Science and Technology (DST), New Delhi, India.

Life member in National Scientific / Technical bodies:

1. Magnetic Society of India (MSI)
2. Materials Research Society of India (MRSI)
3. Indian Physics Association (IPA)

Research Papers / Poster published in National / International Conference proceedings

1. P.S. Ganeshvar, M. Kanagaraj and S. Gunasekaran, (December, 2015), "Experimental and Theoretical Investigation of Gabapentin by Density Functional Theory", 7th Annual Research Congress (KAHEARC-2015), Karpagam University, Coimbatore, Tamilnadu, India.

Brief Research Bio-data:

- 1) Number of publications : **30 (International - 27, National - 3)**
- 2) Total impact factors : **51**
- 3) Number of refereed journal papers : **3**
- 4) Number of books/chapters written : **3**
- 5) Number of conference proceedings : **16**
- 6) Number of conference/workshop attended : **15**
- 7) Number of Invited lectures given : **1**
- 8) Number of Guest lecturers organized: **2**
- 9) Number of awards : **4**
- 10) Total citations : **191**
- 11) H index : **7**
- 12) i10 index : **6**



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FACULTY OF ARTS, SCIENCE AND HUMANITIES

DEPARTMENT OF PHYSICS

Guidance for Career Counselling

Description of Career Counseling	Guidance to Research and Developments in National laboratories
Academic year	2018-2019
Semester	IV& VI
Scheduled Hours	2 hours
Number of Students Enrolled	86
Name of the agencies involved	Karpagam Academy of Higher Education, Coimbatore
Name of the Resource persons	Dr.M.Kanagaraj, Assistant Research Faculty, School of Electronic Science and Engineering Nanjing University, P.R.China
Venue	MBA Seminar Hall

**FACULTY OF ARTS, SCIENCE AND HUMANITIES
DEPARTMENT OF PHYSICS**

Report

Department of Physics organized a career guidance program on “Guidance to Research” on 14.2.2019. Dr.M.Kanagaraj, Assistant Research Faculty, School of Electronic Science and Engineering Nanjing University, P.R.China was invited as the Chief Guest. Resource person was introduced by the Dr. S. Esakkimuthu, Asst Prof., Department of Physics. Guidance was given to students regarding research fields, national laboratories and R & D labs in India and China. The session came to an end with a vote of thanks by Mr. Ashwin Sudhakar (II M. Sc Phy).

Career Counselling

Academic Year: 2018-2019

Semester: IV & VI

Students Name List

S.No	Reg. No	Name of the Student
1	17PHP001	Abinaya.S
2	17PHP002	Allwin Sudhakar
3	17PHP004	Arjun S. Appu
4	17PHP005	Arulayyan.P
5	17PHP006	Ashwin Sudhakar
6	17PHP007	Bhavatharani. M
7	17PHP009	Chithra K. Nair
8	17PHP010	Gokul Prabu. M
9	17PHP012	Harsha Priya. P
10	17PHP013	Inbarajan. K
11	17PHP014	Janani.P
12	17PHP015	Janaranjani. S.N
13	17PHP016	Kalayarasi.C
14	17PHP017	Krishna Prakash. A
15	17PHP019	Ligonia. R
16	17PHP021	Loganayagan. P
17	17PHP022	Manikandan. R
18	17PHP023	Manoj. R
19	17PHP024	Muthukumar. M
20	17PHP025	Naveenprathap. S
21	17PHP027	Pavithra. R

22	17PHP028	Ponni. R
23	17PHP030	Priyadarsini. S
24	17PHP032	Ranjith. D
25	17PHP034	Revathi.E
26	17PHP035	Sangeetha. R
27	17PHP036	Saranya. S
28	17PHP041	Sowndarya. C
29	17PHP043	Subash. L
30	17PHP044	Sudhakar. V
31	17PHP047	Vetriselvan. S
32	17PHP048	Vignesh. M
33	16PHU001	Abishek.S
34	16PHU002	Ajay.A
35	16PHU003	Ajeesh Khan
36	16PHU004	Ajith Kumar.M
37	16PHU005	Ananya Sharma
38	16PHU006	Angel Prabha.M
39	16PHU007	Aravinthan.A
40	16PHU008	Arun.M
41	16PHU009	BagavathiAayee.N
42	16PHU010	Balamurugan.S
43	16PHU012	Deepa.K
44	16PHU014	Dharshini.S
45	16PHU015	Dinesh Kumar.A
46	16PHU016	Divya.M
47	16PHU020	Harishankar.R.P
48	16PHU021	Jai Surya .S
49	16PHU022	Karthika.K
50	16PHU023	Keerthana.S
51	16PHU024	Kishore.G
52	16PHU025	Lavanya.K
53	16PHU026	Logasountharyan.B
54	16PHU027	Logesh.S
55	16PHU028	Maheshwari.K
56	16PHU029	Manoj Kumar.M
57	16PHU030	Manoj.M
58	16PHU032	Nagalakshmi.R
59	16PHU034	Niranjan.M.V
60	16PHU035	Nivetha
61	16PHU036	Padmavathi.N
62	16PHU037	Pavithra.S
63	16PHU040	Prathap.E
64	16PHU041	Praveen Raj.M
65	16PHU043	Pricilla.C
66	16PHU044	Raghul.R
67	16PHU045	Rajarajeshwari.K.T
68	16PHU047	Ramesh.M
69	16PHU048	Ranitha.S

70	16PHU049	Ranjith.R
71	16PHU050	Ranjithkumar.S
72	16PHU051	Roshini.L
73	16PHU052	Sailakshmi.P.V
74	16PHU054	Saranya.C
75	16PHU055	Saranya.M
76	16PHU056	SarathKumar.R
77	16PHU057	Sathya Krishna.R
78	16PHU058	Shalini.V
79	16PHU059	Sivapreetha.M
80	16PHU060	Sivaselvan.K
81	16PHU062	Surendhar.D
82	16PHU063	Sureshkumar.S
83	16PHU064	Tamilarasan.S
84	16PHU065	Then Tamil.G
85	16PHU066	Vignesh.S
86	16PHU068	Yogeshwari.S

