

**Dr. Amarajothi DHAKSHINAMOORTHY**

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<https://mkuniversity.ac.in/new/school/sc/dhakshinamoorthy.php><https://www.scopus.com/results/authorNamesList.uri?st1=dhakshinamoorthy&st2=amarajothi&origin=searchauthorlookup>**1. Personal Details**

Date of Birth & Age : 20.04.1980 & 43  
Gender & Marital Status : Male & Married  
Community : BC  
Nationality : Indian  
Place of Birth : Guruvarajapettai

**2. Educational Qualifications****2.1. Academic**

Degree/ Examination	Name of the Exam	University/ Institute	Year of Passing	Percentage/ Grade	Main Subject
Under Graduate	B.Sc.,	Loyola College	2000	73	Chemistry
Post Graduate	M.Sc.,	Loyola College	2002	77	Chemistry
NET	NET- Lectureship	UGC	2002	-	Chemistry

\*Add additional rows for other academic degrees obtained / remove if not necessary

**2.2. Research**

Degree	Name of the University	Title of the Thesis	Date of Submission	Date of Award
PhD	MKU	Reusable Catalysts and Reagents in Organic Synthesis	18.05.2008	06.04.2009
MPhil	-	-	-	-
DSc/DLitt	-	-	-	-

**3. Post-Doctoral/ Research Associate / Industrial Experience**

Name of the University / Institute / Industry	Period of Work	Nature of Work
Technical University of Valencia	2008-2012	Post-doctoral Fellow

#### 4. Professional Experience

No	Name of the University / Institution	Position Held	From (Date)	To (Date)
1	MKU	UGC-Assistant Professor	12.06.2013	Till now

#### 5. Teaching (List all the courses taught (semester-wise) – MPhil, PG and UG)

No	Year	Semester	Course Code	Course Title	Hours per Week
1	2021-22	I		Organic Reaction Mechanism and Stereochemistry	
2	2021-22	II		Conformational Analysis, Reagents and Organic Synthesis	
3	2021-22	III		Green Chemistry (Elective)	
4	2021-22	III		Computational Chemistry and Analytical Techniques (Elective)	
5	2021-22	III		Chemical Kinetics, Surface Chemistry, Macros, Biophysical Chemistry	
6	2021-22	IV		Natural Products	
7	2021-22	IV		Physical Surface Chemistry	
8	2021-22	IV		Project Work	
9	2021-22	I		Advanced Coatings Technologies	
10	2021-22	I		Research Methodology	
11	2021-22	I		Indepth Study on Published Literature	

\*Add additional rows

#### 6. Design/Development of New Curricula and Courses

No	Description	Organization for which it was Developed	Level(PG/UG)

#### 7. Creation of ICT Mediated Teaching-Learning Pedagogy

##### 7.1. SWAYAM / MOOCs

No	Description	Organization for which it was Developed	Level(PG/UG)

### 7.2. E-Contents

No	Description	Organization for which it was Developed	Level(PG/UG)
1	PPT	MKU	PG
2	PPT	MKU	PG Diploma

### 7.3. Development of other ICT Mediated Teaching-Learning Pedagogy

No	Description	Organization for which it was Developed	Level(PG/UG)
1	PPT	MKU	PG
2	PPT	MKU	PG Diploma

### 8. Research Specialization / Field of Research (Give in bullet points)

- Heterogeneous catalysis by metal-organic frameworks (MOFs) as catalysts/supports
- Developing green organic transformations using MOFs
- Carbocatalysis (Graphene, doped graphenes and carbon nitride)
- Organic reactions promoted by metal nanoparticles@metal oxides
- Photocatalysis by MOFs
- Pollutant degradation by MOFs

### 9. Research Publications

Type	International	National
Papers Published in UGC-CARE Listed Journals	-	-
Papers in Refereed Journals (Not mentioned above)	172	-
Books Published	-	-
Books Edited	1	-
Contributions to Book Chapters	5	-
Editor of Conference/Seminar Proceedings	-	-
Papers Published in Conference/Seminar Proceedings	-	-
Papers Presented in Conferences/Seminars	-	5
Conference/Seminar/Workshop Attended	3	3
Deposits in CCDC, PDB, etc.	-	

### 10. Citation Metrics

Cumulative Impact Factor (Recent Annual JCR)	1987.23
Total Citations (Scopus/Web of Science)	13689
h-Index (Scopus/Web of Science)	61
g-Index (Scopus/Web of Science)	80
i10 Index (Scopus/Web of Science)	129

### 11. Details of Patents

M. Alvaro, A. Dhakshinamoorthy, H. Garcia, (2012) Catalyst for selective oxidation of hydrocarbons, (PCT Intl. Appl. WO 2011089301).

## 12. Research Guidance/Supervision

Degree / Programme	Completed	Submitted	Ongoing
PhD (Full-time)	3	-	2
PhD (Part-time)	-	-	-
MPhil Research Project (Full-time)	4	-	-
MPhil Research Project (Part-time)	-	-	-
MSc Projects/Dissertation	18	-	-
MSc Internships/Summer or Winter Projects	2	-	-

## 13. Funded Research Projects

### 13.1. Ongoing

No	Title of the Project	Funding Agency	Period / Duration	Total Grants Sanctioned (Rs)

### 13.2 Completed

No	Title of the Project	Funding Agency	Duration and Month & Year of Completion	Total Grants Received (Rs)	No of Papers out of Project
1	Green Recyclable Porous Materials as Catalysts for the Synthesis of Fine Chemicals	DST-SERB	2014-17	25 Lakhs	15
2	Catalysis by Metal Organic Frameworks	UGC	2014-16	6 Lakhs	8
3	Engineering Metal Organic Frameworks as Solid Catalysts for the Aerobic Oxidation of Hydrocarbons"	DST-SERB	2017-20	40.71 Lakhs	14

## 14. Reviewer in Journals (List of Journals and Total No of Articles Reviewed)

Name of the Journal	Publisher	No of Papers Reviewed
ACS Applied Materials and Interfaces	American Chemical Society	84
ACS Catalysis		
ACS Omega		
ACS Applied Energy Materials		
Inorganic Chemistry		
ACS Sustainable Chemistry and Engineering		
Petroleum Research Fund		
The Journal of American Chemical Society		
The Journal of Physical Chemistry		
Industrial and Engineering Chemistry		

Research				
Accounts of Chemical Research				
Journal of Organic Chemistry				
Crystal Growth and Design				
Chemical Reviews				
ChemCatChem	Wiley	124		
ChemPlusChem				
Angewandte Chemie International Edition				
ChemSusChem				
European Journal of Inorganic Chemistry				
Chemistry A European Journal				
Energy Technology				
ChemistrySelect				
Applied Organometallic Chemistry				
Asian Journal of Organic Chemistry				
Small				
Applied Catalysis A General			Elsevier	462
Applied Catalysis B Environmental				
Applied Surface Science				
Catalysis Communications				
Catalysis Today				
Chemosphere				
Chinese Chemical Letters				
Inorganic Chimica Acta				
Journal of Colloid and Interface Science				
Journal of Environmental Chemical Engineering				
Journal of Hazardous Materials				
Journal of Industrial and Engineering Chemistry				
Coordination Chemistry Reviews				
Molecular Catalysis				
Carbohydrate Polymers				
Journal of Catalysis				
Chemical Engineering Journal				
Materials and Design				
Materials Science and Engineering C				
Nano Structure & Nano Objects				
European Polymer Journal				
Environmental Pollution				
International Journal of Biological Macromolecules				
Microchemical Journal				
Dyes and Pigments				
Journal of Organometallic Chemistry				
Microporous Mesoporous Materials				

Catalysis Science and Technology	Royal Society of Chemistry	36
RSC Advances		
Chemical Communications		
Chemical Society Reviews		
Chemical Science		
Physical Chemistry Chemical Physics		
New Journal of Chemistry		
Nanoscale		
Dalton Transactions		
J. Mater. Chem. A		
Inorganic Chemistry Frontiers		
Nature Communications	Nature Publishing Group	4
Scientific Reports	Springer Nature	2
Polymers	MDPI	58
Sensors		
Nanomaterials		
Catalysts		
Crystals		
Molecules		
Ceramics		
Materials		
Metals		

## 15. Research Collaborations

Name of the Collaborator	Institute	Collaboration Details
Prof. Hermenegildo Garcia	Technical University of Valencia, Spain	Research work
Prof. Mercedes Alvaro	Technical University of Valencia, Spain	Research work
Prof. Sergio Navalon	Technical University of Valencia, Spain	Research work
Prof. Norbert Stock	University of Kiel, Germany	Research work
Prof. Markus Anonietti	Max Plank Institute, Germany	Research work
Prof. Ali Morsali	University of Zabool, Iran	Research work
Prof. Rafael Luque	University of Cordoba, Spain	Research work
Prof. Shyam Biswas	IIT Guwahati, India	Research work

## 16. Countries Visited

Name of the Country	Period	Purpose
Technical University of Valencia, Spain	2014, 2016, 2017, 2018, 2019	Research work
University of Kiel, Germany	2015	Research work

## 17. Honours / Awards / Recognitions

<b>Name of the Honours / Awards / Recognition</b>	<b>Awarding Agency</b>	<b>International / National / State / Institute Level</b>
Top 2% Scientists in the world ranking in India, 2022	Standford University, USA	International
Top 2% Scientists in the world ranking in India, 2022	Standford University, USA	International
Top 2% Scientists in the world ranking in India, 2020	Standford University, USA	International
Fellow of Royal Society of Chemistry	Royal Society of Chemistry	International
Indian National Science Academy- Deutsche Forschungs gemeinschaft bilateral exchange award	INSA	National
Young Scientist Award 2014 for Chemical Sciences,	The Academy of Sciences, Chennai.	State
Early Career Advisory Board	Elsevier	International

## 18. Conferences / Seminars / Workshops Organized

<b>Level</b>	<b>Conference Title</b>	<b>Date(s)</b>	<b>Place</b>	<b>Role Played</b>	<b>Funding</b>

## 19. Invited Lectures / Resource Person

<b>No</b>	<b>Institute / Organizer</b>	<b>Name of the Conference / Seminar / Workshop</b>	<b>International / National / State / Institute Level</b>	<b>Date(s)</b>
21	Holy Cross College, Nagercoil	One Day National Seminar 2018	State Level	29.08.2018
20	Periyar University, Salem	Recent Innovations in Organic Synthesis, 2016	State Level	16.12.2016
19	Vivekananda College, Madurai	Modern Trends in Chemistry-22	State Level	28.03.2016
18	Bharadhidasan University, Trichy	UGC-ASC sponsored Refresher Course for Chemistry Teachers	State Level	09.02.2015
17	Madurai Kamaraj University	UGC-ASC sponsored Refresher Course for Chemistry Teachers	State Level	09.01.2015
16	Vivekananda College, Tiruvedakam.	Board of Studies meeting (Subject Expert)	State Level	07.01.2015

15	Madurai Kamaraj University	UGC-ASC sponsored Refresher Course for Chemistry Teachers	State Level	30.12.2014
14	Madurai Kamaraj University	UGC-ASC sponsored Refresher Course for Chemistry Teachers	State Level	30.12.2014
13	Madurai Kamaraj University	UGC-ASC sponsored Refresher Course for Chemistry Teachers	State Level	28.12.2014
12	St. Xaviers College, Palayamkottai	RSC Symposium on Recent Trends in Chemical Sciences	State Level	12.12.2014
11	Sree Narayana College, Chathannur, Kollam, Kerala, 691 579	UGC-Sponsored National Seminar on Green Approach to Meet Challenges in Chemical Industry	National	05.11.2014
10	C.P.A. College, Bodinayakkanur.	DST INSPIRE (Phase III) Internship Science Camp	State Level	30.10.2014
9	Sarah Tucker College, Tirunelveli	Guest Lecture to promote higher education in colleges	State Level	26.09.2014
8	P.S.N College of Engineering, Tirunelveli	DST Nominee	State Level	26.09.2014
7	Arul Anandar College, Karumattur, Madurai (Invited Lecture)	DST Sponsored National Lecture Workshop on Current Trends in Chemistry	State Level	27.02.2014
6	C.P.A. College, Bodinayakkanur.	DST INSPIRE (Phase II) Internship Science Camp	State Level	26.02.2014
5	Devanga Arts and Science College, Aruppukottai	UGC Sponsored one-day National level seminar on Recent Trends in Chemistry	State Level	22.02.2014
4	School of Chemistry, Madurai Kamaraj University, Madurai-21	UGC-Sponsored Academic Staff College Refresher Course	State Level	16.11.2013
3	School of Chemistry, Madurai Kamaraj University, Madurai-21	UGC-Sponsored Academic Staff College Refresher Course	State Level	08.11.2013
2	School of	UGC-Sponsored	State Level	07.11.2013



	Chemistry, Madurai Kamaraj University, Madurai-21	Academic Staff College Refresher Course		
1	Ayya Nadar Janaki Ammal College, Sivakasi	(Special Lecture)	State Level	24.08.2013

## 20. Professional Development Programs / Faculty Development Programs Organized

Name of the Program	Role	Place	Date(s)	Funds in Rs & Sponsor

## 21. Professional Development Programs / Faculty Development Programs Attended

Name of the Program	Place	Date(s)	Sponsor
UGC-Sponsored Refresher Course on Frontiers in Chemistry		10.11.2021 to 23.11.2021	UGC- HRDC, MKU
UGC-Sponsored Refresher Course on Advanced Functional Materials	UGC-Human Resource Development Centre, Madurai Kamaraj University	09.12.2020 to 22.12.2020	UGC- HRDC, MKU
UGC-Sponsored Orientation Programme	UGC-Human Resource Development Centre, Madurai Kamaraj University	05.02.2020 to 25.02.2020	UGC- HRDC, MKU

## 22. Administrative Experiences

Role Played	Responsibilities	Period (from ... to)
Member	Central Instrumentation Centre, MKU	2020, 2021, 2022
Member	Self-Study Report (SSR) preparation for NAAC assessment of 4 <sup>th</sup> Cycle, MKU	2019-2020
Member	Question paper preparation for MKU eligibility entrance test for M.Phil./PhD	2019, 2020
Member	DST-FIST proposal preparation, School of Chemistry	2018
Examination Coordinator	School of Chemistry, MKU	2015-16, 2016-17
Member	Website design, MKU	2014
Member	Purchase committee, School of Chemistry, MKU	2014, 2015, 2016

**23. Membership in Academic Bodies (BoS, DC, External Examiner, etc.)**

<b>Name of the University / Institute / College</b>	<b>Type of Membership</b>	<b>Duration / Period</b>
Vivekananda College, Madurai,	Member, Board of studies,	2014-2015, 2015-2016
Kannur University, Kerala, India.	PhD thesis adjudicator	2018

**24. Membership in Recognised Professional Bodies**

<b>Name of the Professional Body</b>	<b>International / National</b>	<b>Type of Membership</b>
Nuclear Magnetic Resonance Society	National	Life Member
Royal Society of Chemistry	International	Fellow
Elsevier	International	Advisory Board

**25. Languages Known**

<b>Languages</b>	<b>Read</b>	<b>Write</b>	<b>Speak</b>
Tamil	Yes	Yes	Yes
English	Yes	Yes	Yes
Spanish	Yes	No	Yes

**26. Competence in Computer Applications****27. Involvement in Extension Activities other than Academic Works****28. Any Other Relevant Information**

### Details of Publications

- 172 Metal–Organic Frameworks-Based Cathode materials for Energy Storage Applications: A Review, S. Nagappan, M. Duraivel, V. Elayappan, N. Muthuchamy, B. Mohan, **A. Dhakshinamoorthy**, K. Prabakar, J.-M. Lee, K. H. Park, *Energy Technol.* **2023**, DOI: 10.1002/ente.202201200
- 171 Recent Advances in the Use of Covalent Organic Frameworks as Heterogeneous Photocatalysts in Organic Synthesis, A. L. Magano, S. Daliran, A. R. Oveisi, R. M. Ballesté, **A. Dhakshinamoorthy**, J. Alemán, H. Garcia, R. Luque, *Adv. Mater.* **2023**, DOI: 10.1002/adma.202209475
- 170 Metal–Organic Frameworks as Photocatalysts for Solar-Driven Overall Water Splitting, S. Navalón, **A. Dhakshinamoorthy**, M. Álvaro, B. Ferrer, H. García, *Chem. Rev.* **2023**, *123*, 445-490.
- 169 Synthesis of 4-styrylquinazolines using copper-based porous solid catalyst, J. Krishnan, K. Ranjithkumar, **A. Dhakshinamoorthy**, *Mol. Catal.* **2022**, *533*, 112760.
- 168 Friedlander condensation reaction catalysed by hafnium-based metal-organic framework, S. Ghosh, J. Krishnan, V. Karthik, A. Rana, **A. Dhakshinamoorthy**, S. Biswas, *Mol. Catal.* **2022**, *533*, 112748
- 167 Microwave-Assisted Biodiesel Production Using UiO-66 MOF Derived Nanocatalyst: Process Optimization Using Response Surface Methodology, S. P. Gouda, J. M. H. Anal, P. Kumar, **A. Dhakshinamoorthy**, U. Rashid, S. L. Rokhum, *Catalysts*, **2022**, *12*, 1312.
- 166 Metal-organic framework as a heterogeneous catalyst for biodiesel production: A review, S. P. Gouda, **A. Dhakshinamoorthy**, S.L. Rokhum, *Chem. Eng. J. Adv.* **2022**, *12*, 100415.
- 165 Porous Metal Organic Frameworks as Multifunctional Catalysts for Cyclohexane Oxidation, **A. Dhakshinamoorthy**, A. López-Francés, S. Navalon, H. Garcia, *ChemCatChem*, **2022**, *14*, e202201036.
- 164 Graphitic Carbon Nitride as Visible-Light Photocatalyst Boosting Ozonation in Wastewater Treatment, **A. Dhakshinamoorthy**, A. López-Francés, S. Navalon, H. Garcia, *Nanomaterials*, **2022**, *12*, 3494.
- 163 Promotional Effects on the Catalytic Activity of Co-Fe Alloy Supported on Graphitic Carbon for CO<sub>2</sub> Hydrogenation, B. Jurca, L. Peng, A. Primo, A. Gordillo, **A. Dhakshinamoorthy**, V. I. Parvulescu, H. García, *Nanomaterials*, **2022**, *12*, 3220.

- 162 Nanomolar Level Fluorogenic Detection of Cyanide with an Amide Functionalized Zirconium Metal-Organic Framework and Its Application in Real-World Cyanide Monitoring, S. Ghosh, N. Nagarjun, M. Alam, **A. Dhakshinamoorthy**, S. Biswas, *Eur. J. Inorg. Chem.* **2022**, e202200110.
- 161 Diamino group-functionalized Zr-based metal-organic framework for fluorescence sensing of free chlorine in the aqueous phase and Knoevenagel condensation, C. Gogoi, N. Nagarjun, A. Rana, **A. Dhakshinamoorthy**, S. Biswas, *Dalton Trans.* **2022**, 51, 6964-6975.
- 160 Palladium-Based Metal Organic Frameworks as Heterogeneous Catalysts for C–C Couplings, A.S. Lawrence, N. Martin, B. Sivakumar, F.G. Cirujano, **A. Dhakshinamoorthy**, *ChemCatChem*, **2022**, 14, e202200403.
- 159 Two birds with one arrow: a functionalized Al(iii) MOF acts as a fluorometric sensor of dopamine in bio-fluids and a recyclable catalyst for the Biginelli reaction, S. Ghosh, N. Nagarjun, S. Nandi, **A. Dhakshinamoorthy**, S. Biswas, *J. Mater. Chem. C*, **2022**, 10, 6717-6727
- 158 Tridimensional N, P Codoped Carbon Sponges as Highly Selective Catalysts for Aerobic Oxidative Coupling of Benzylamine, L. Peng, H. G. Baldovi, **A. Dhakshinamoorthy**, A. Primo, H. Garcia, *ACS Omega*, **2022**, 7, 11092-11100
- 157 Enhancement of lipid accumulation in microalga *Desmodesmus* sp. VV2: Response Surface Methodology and Artificial Neural Network modeling for biodiesel production, E. Vimali, A. Senthil Kumar, N. S. Vignesh, B. Ashokkumar, **A. Dhakshinamoorthy**, A. Udayan, M. Arumugam, A. Pugazhendhi, P. Varalakshmi, *Chemosphere*, **2022**, 293, 133477
- 156 Supported metals on porous solids as heterogeneous catalysts for the synthesis of propargylamines, F. G. Cirujano, **A. Dhakshinamoorthy**, *New J. Chem.* **2022**, 46, 1469-1482.
- 155 Detecting Lewis acid sites in metal-organic frameworks by density functional theory, A. Shophia Lawrence, B. Sivakumar, **A. Dhakshinamoorthy**, *Mol. Catal.* **2022**, 517, 112042.
- 154 Friedel-Crafts alkylation reaction efficiently catalyzed by a di-amide functionalized Zr(IV) metal-organic framework, S. Ghosh, N. Nagarjun, M. Alam, **A. Dhakshinamoorthy**, S. Biswas, **2022**, 517, *Mol. Catal.* 112007.
- 153 Challenges and Opportunities for the Encapsulation of Enzymes over Porous Solids

- for Biodiesel Production and Cellulose Valorization into Glucose, F.G. Cirujano, **A. Dhakshinamoorthy**, *ChemCatChem*, **2021**, 13, 4679-4693.
- 152 A. Das, N. Anbu, C. Gogoi, **A. Dhakshinamoorthy**, S. Biswas, Amino Group Functionalized Hf-Based Metal-Organic Framework for Knoevenagel-Doebner Condensation, *Eur. J. Inorg. Chem.* **2021**, 3396-3403.
- 151 F.G. Cirujano, **A. Dhakshinamoorthy**, Engineering of Active Sites in Metal–Organic Frameworks for Biodiesel Production, *Adv. Sustain. Sys.* **2021**, 5, 2100101.
- 150 N. Nagarjun, K. Arthy, **A. Dhakshinamoorthy**, Copper(II)-Doped ZIF-8 as a Reusable and Size Selective Heterogeneous Catalyst for the Hydrogenation of Alkenes using Hydrazine Hydrate, *Eur. J. Inorg. Chem.* **2021**, 2108-2119.
- 149 **A. Dhakshinamoorthy**, M. Alvaro, A.M. Asiri, H. Garcia,  $\alpha,\beta$ -Enone Borylation by Bis(Pinacolato)Diboron Catalyzed by  $\text{Cu}_3(\text{BTC})_2$  Using Cesium Carbonate as a Base, *Nanomaterials*, **2021**, 11,1396.
- 148 F. G. Cirujano, R. Luque, **A. Dhakshinamoorthy**, Metal-Organic Frameworks as Versatile Heterogeneous Solid Catalysts for Henry Reactions, *Molecules*, **2021**, 26, 1445.
- 147 C. Gogoi, N. Nagarjun, S. Roy, SK. Mostakim, D. Volkmer, **A. Dhakshinamoorthy**, S. Biswas, A Zr-Based Metal–Organic Framework with a DUT-52 Structure Containing a Trifluoroacetamido-Functionalized Linker for Aqueous Phase Fluorescence Sensing of the Cyanide Ion and Aerobic Oxidation of Cyclohexane, *Inorg. Chem.* **2021**, 60, 4539-4550.
- 146 A. Garcia-Mulero, H. G. Baldoví, **A. Dhakshinamoorthy**, A. Primo, A. Corma, H. García, Microporous 3D graphitic carbons obtained by soft templating as carbocatalysts for aerobic oxidation, *Appl. Catal A: Gen.* **2021**, 612, 118014.
- 145 W. A. Durai, A. Ramu, **A. Dhakshinamoorthy**, A Visual and Ratiometric Chemosensor Using Thiophene Functionalized Hydrazone for the Selective Sensing of  $\text{Pb}^{2+}$  and  $\text{F}^-$  Ions, *J. Fluorescence*, **2021**, 31, 465-474.
- 144 **A. Dhakshinamoorthy**, E. M. Lanzuela, S. Navalon, H. Garcia, Cobalt-based Metal Organic Frameworks as Solids Catalysts for Oxidation Reactions, *Catalysts*, **2021**, 11, 95.
- 143 **A. Dhakshinamoorthy**, M. Jacob, N.S. Vignesh, P. Varalakshmi, Pristine and modified chitosan as solid catalysts for catalysis and biodiesel production: A minireview, *Int. J. Biolog. Macromol.* **2021**, 167, 807-833.

- 142 N. Nagarjun, M. Jacob, P. Varalakshmi, **A. Dhakshinamoorthy**, UiO-66(Ce) metal-organic framework as a highly active and selective catalyst for the aerobic oxidation of benzyl amines, *Mol. Catal.* **2021**, 499, 111277.
- 141 **A. Dhakshinamoorthy**, C. V. García, P. Concepcion, H. Garcia, Arene borylation through C-H activation using Cu<sub>3</sub>(BTC)<sub>2</sub> as heterogeneous catalyst, *Catal. Today*, **2021**, 366, 212-217.
- 140 **A. Dhakshinamoorthy**, S. Navalon, A.M. Asiri, H. Garcia, Gold-Nanoparticles-Decorated Metal-Organic Frameworks for Anticancer Therapy, *ChemMedChem*, **2020**, 15, 2236-2256.
- 139 **A. Dhakshinamoorthy**, A. M. Asiri, H. Garcia, Catalysis in Confined Spaces of Metal Organic Frameworks, *ChemCatChem*, **2020**, 12, 4732-4753
- 138 W. Anbu Durai, A. Ramu, **A. Dhakshinamoorthy**, A chromogenic and fluorescence turn-on sensor for the selective and sensitive recognition of Al<sup>3+</sup> ions – A new approach by Schiff base derivative as probe, *Inorg. Chem. Commun.* **2020**, 121, 108191.
- 137 **A. Dhakshinamoorthy**, A. M. Asiri, H. Garcia, Integration of metal organic frameworks with enzymes as multifunctional solids for cascade catalysis, *Dalton Trans.*, **2020**, 49, 11059-11072.
- 136 C. Vallés-García, E. Montero-Lanzuela, S. Navalon, M. Alvaro, **A. Dhakshinamoorthy**, H. Garcia, Tuning the active sites in reduced graphene oxide by hydroquinone functionalization for the aerobic oxidations of thiophenol and indane, *Mol. Catal.* **2020**, 493, 111093
- 135 R. Karpagam, K. Rani, B. Ashokkumar, I. Ganesh Moorthy, **A. Dhakshinamoorthy**, P. Varalakshmi, Green energy from Coelastrella sp. M-60: Bio-nanoparticles mediated whole biomass transesterification for biodiesel production, *Fuel*, **2020**, 279, 118490
- 134 A. Das, N. Anbu, P. Varalakshmi, **A. Dhakshinamoorthy**, S. Biswas, A hydrazine functionalized UiO-66(Hf) metal–organic framework for the synthesis of quinolines via Friedländer condensation, *New J. Chem.*, **2020**, 44, 10982-10988.
- 133 A. Das, N. Anbu, M. Sk, **A. Dhakshinamoorthy**, S. Biswas, Highly Active Bisamino Functionalized Zr(IV)-UiO-67 Metal-Organic Framework for Cascade Catalysis, *Eur. J. Inorg. Chem.* **2020**, 2830-2834.
- 132 R. Fang, **A. Dhakshinamoorthy**, Y. Li, H. Garcia, Metal organic frameworks for biomass conversion, *Chem. Soc. Rev.* **2020**, 49, 3638-3687.

- 131 S. Navalón, **A. Dhakshinamoorthy**, M. Álvaro, H. García, Diamond Nanoparticles in Heterogeneous Catalysis, *Chem. Mater.* **2020**, *32*, 4116-4143.
- 130 **A. Dhakshinamoorthy**, A.M. Asiri, H. Garcia, Metal-Organic Frameworks as Multifunctional Solid Catalysts, *Trends Chem.* **2020**, *2*, 454-466.
- 129 A. Das, N. Anbu, M. Sk, **A. Dhakshinamoorthy**, S. Biswas, Influence of Hydrogen Bond Donating Sites in UiO-66 Metal-Organic Framework for Highly Regioselective Methanolysis of Epoxides, *ChemCatChem*, **2020**, *12*, 1789-1798.
- 128 Chitosan as a biodegradable heterogeneous catalyst for Knoevenagel condensation between benzaldehydes and cyanoacetamide, N. Anbu, R. Maheswari, V. Elamathi, P. Varalakshmi, **A. Dhakshinamoorthy**, *Catal. Commun.* **2020**, *138*, 105954.
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