List of Patents and Publications from the Laboratory of Dr. Rajendra Srivastava

(List of Granted Patents)

1. Crystalline mesoporous ZSM-5 and mesoporous silicalite zeolites and the process for their preparation thereof
   Dr. Rajendra Srivastava and Mr. Rajkumar Kore
   Indian Patent 297724 **(18th June 2018)**
2. Process for the preparation of cyclic carbonates
   Darbha Srinivas and **Rajendra Srivastava**
   USA Patent 7,365,214B2 (29th April 2008)
3. Adenine modified silica-based catalyst, a process for the preparation and use there for the production of cyclic carbonates
   Darbha Srinivas, **Rajendra Srivastava** and Paul Ratnasamy
   USA patent 7,375,224B2 (20th May 2008)
4. Process for the preparation of carbamates
   Darbha Srinivas, **Rajendra Srivastava** and Paul Ratnasamy
   USA Patent 7,405,319B2 (29th July 2008)
5. An improved process for the preparation of lubricants by using double metal cyanide catalysts
   Darbha Srinivas, **Rajendra Srivastava** and Paul Ratnasamy
   European Patent EP1733 788 B1 (2008)
6. Process for the preparation of hydrocarbon fuel
   Darbha Srinivas, **Rajendra Srivastava** and Paul Ratnasamy
   USA Patent 7,482,480B2 (27th January 2009)
7. **Process for the preparation of Dialkyl Carbonates**
   Darbha Srinivas, **Rajendra Srivastava** and Paul Ratnasamy
   USA Patent 7,518,012B2 (14th April 2009)
8. Transesterification Catalyst and a process for the preparation thereof
   Darbha Srinivas, **Rajendra Srivastava** and Paul Ratnasamy
   USA Patent 7,754,643B2 (13th July 2010)

(Patent Field)

1. A Process for synthesizing catalytic form of crystalline multi-level porous zeolite
   Dr. Rajendra Srivastava and Ms. Poonam Rani
   Indian Patent (LRN No: P3132-IN) Application No: 201811041660, Dated 02/11/2018

(List of Publication in Journals, Year wise)

Year 2020

[141] An Account of the Catalytic Transfer Hydrogenation and Hydrogenolysis of Carbohydrates-Derived Renewable Platform Chemicals over Non-Precious Heterogeneous Metal Catalysts
Atal Shivhare, Abhinav Kumar and **Rajendra Srivastava**[*]
ChemCatChem 2020, http://dx.doi.org/10.1002/cctc.202001415,

[140] Pd Decorated Magnetic Spinels for Selective Catalytic Reduction of Furfural: Interplay of Framework Substituted Transition Metal and Solvent in Selective Reduction
Abhinav Kumar and **Rajendra Srivastava**[*]
ACS Applied Energy Materials 2020, 3, 9928-9939 (Impact Factor = 4.5)

[139] Efficient hydrogenolysis of aryl ethers over Ce-MOF supported Pd NPs under mild conditions: Mechanistic insight using density functional theoretical calculations
Ashish Kumar Kar, Surinder Pal Kaur, T. J. Dhilip Kumar and **Rajendra Srivastava***
Catalysis Science and Technology 2020, 10, 6892-6901 (Impact Factor = 5.7)

[138] Bi-Functional Magnesium Silicate Catalyzed Glucose and Furfural Transformations to Renewable Chemicals
Abhinav Kumar and **Rajendra Srivastava**[*]
ChemCatChem **2020**, *12*, 4807-4816 (Impact Factor = 4.9) (**Featured as Cover Page of the Journal**)

[137] Comprehensive Understanding of the Eco-friendly Synthesis of Zeolites: Needs of 21st Century Sustainable Chemical Industries
Poonam Rani and **Rajendra Srivastava**[*]
The Chemical Record **2020**, *20*, 968-988 (Impact Factor = 6.2)

[136] Zirconium Phosphate Catalyzed Transformations of Biomass Derived Furfural to Renewable Chemicals
Abhinav Kumar and **Rajendra Srivastava**[*]
ACS Sustainable Chemistry & Engineering 2020, 8, 9497-9506 (Impact Factor = 7.6)

[135] Catalytic Conversion of CO_2 to Chemicals and Fuels: The Collective Thermocatalytic/Photocatalytic/Electrocatalytic Approach with Graphitic Carbon Nitride

Subhajyoti Samanta and **Rajendra Srivastava***

Materials Advances (RSC), 2020, 1, 1506-1545.

[134] Understanding the Co:Mo Compositional Modulation and Fe-Interplay in Multicomponent Sulfide Electrocatalysts for Oxygen and Hydrogen Evolution Reactions

Aniruddha Mukherji, Rajaram Bal, **Rajendra Srivastava***

***ChemElectroChem* 2020**, 7, 2740-2751 (Impact Factor = 4.2), **Featured as the Cover Page of the Journal**.

[133] ZIF-8-Nanocrystalline Zirconosilicate Integrated Porous Material for the Activation and Utilization of CO_2 in Insertion Reactions

Diksha Srivastava, Poonam Rani and **Rajendra Srivastava***

***Chemistry-An Asian Journal,* 2020**, *15*, 1132-1139. (Impact Factor = 4.1)

Year 2019

[132] Surface modified C, O co-doped polymeric g-C_3N_4 as an efficient photocatalyst for visible light assisted CO_2 reduction and H_2O_2 production

Subhajyoti Samanta, Rajkumar Yadav, Abhinav Kumar, Anil Kumar Sinha, and **Rajendra Srivastava***

***Applied Catalysis B: Environmental*, 2019, 259, 118054 (Page number yet to be added) (**https://www.sciencedirect.com/science/article/abs/pii/S0926337319308008**)** (**Impact factor = 16.7**)

[131] Multi-functional metal-organic framework and metal-organic framework-zeolite nanocomposite for the synthesis of carbohydrate derived chemicals via one-pot cascade reaction

Poonam Rani and **Rajendra Srivastava***

***Journal of Colloid and Interface Science*, *2019*, *557*, *144-155*. (*Impact factor = 7.5*)**

[130] Solvent-Dependent, Formic Acid-Mediated, Selective Reduction and Reductive N-Formylation of N-Heterocyclic Arenes with Sustainable Cobalt-Embedded N-Doped

Porous Carbon Catalyst

Ashish Kumar Kar and **Rajendra Srivastava**[*]

ACS Sustainable Chemistry & Engineering 2019, 7, 13136-13147. (**Impact Factor = 7.6**)

[129] $CePO_4$, a multi-functional catalyst for carbohydrate biomass conversion: production of 5-hydroxymethylfurfural, 2,5-diformylfuran, and γ-valerolactone

Abhinav Kumar and **Rajendra Srivastava**[*]

Sustainable Energy and Fuels **2019,** 3, 2475-2489. **(HOT Article-2019)** (Impact Factor = 5.5)

[128] Extra-Framework Aluminum Species of Zeolite that Surrogate the Growth of Metal Organic Framework from Zeolite Matrix

Poonam Rani and Rajendra Srivastava[*]

Chemistry-An Asian Journal **2019**, 14, 2598-2603. (**Impact Factor = 4.1**)

[127] Few-layer MoS_2 wrapped $MnCO_3$ on graphite paper: A hydrothermally grown hybrid negative electrode for electrochemical energy storage

Aniruddha Mukherji, Lakshi Saikia, Rajendra Srivastava

Chemical Engineering Journal, ***2019,*** 373, 1233-1246. (**Impact Factor = 10.7**)

[126] Starch coated silica nanospheres parenting the growth of trimodal porous zeolites for catalysis involving large molecules

Poonam Rani and **Rajendra Srivastava**[*]

ACS Sustainable Chemistry & Engineering **2019,** 7, 9822-9833 (***Impact Factor* = 7.6**) **Featured as the Cover Page of the Journal.**

[125] Unrevealing the impact of Pd nanoparticles@$BiVO_4$/S-CN heterostructure on the photo-physical & opto-electronic properties for enhanced catalytic activity in water splitting and one-pot, three-step tandem reaction

Subhajyoti Samanta, Biswarup Satpati, and **Rajendra Srivastava***

Nanoscale Advances, **2019**, *1*, 1395-1412

[124] Selective synthesis of Cu-Cu_2O/C and CuO-Cu_2O/C catalysts for Pd free C-C, C-N coupling and oxidation reactions

Ashish Kumar Kar and **Rajendra Srivastava**[*]

Inorganic Chemistry Frontiers **2019**, 6, 576-589. (**Impact factor = 6.0**)

[123] $FeVO_4$ decorated $–SO_3H$ functionalized polyaniline for direct conversion of sucrose to 2,5-diformylfuran & 5-ethoxymethylfurfural and selective oxidation reaction
Abhinav Kumar and **Rajendra Srivastava***
Molecular Catalysis, 2019, 465, 68-79. (Impact factor = 3.7)

[122] Selective two-step synthesis of 2,5-diformylfuran from monosaccharide, disaccharide, and polysaccharide using H-Beta and octahedral MnO_2 molecular sieves
Bhaskar Sarmah and **Rajendra Srivastava***
***Molecular Catalysis* 2019**, *462,* 92-103. (Impact factor = 3.7)

Year 2018

[121] Systematic investigation for the photocatalytic applications of carbon nitride/porous zeolite heterojunction
Abhinav Kumar, Subhajyoti Samanta, and **Rajendra Srivastava***
***ACS Omega* 2018**, *3*, 17261−17275 **(Impact factor = 2.9)**

[120] Electrochemical Sensor Platforms Based on Nanostructured Metal Oxides, and Zeolite-Based Materials
MU Anu Prathap, Balwinder Kaur, and **Rajendra Srivastava***
***The Chemical Record* 2018**, *18*, 1-18. (**Impact factor = 6.2**)

[119] Exploring the dicationic gemini surfactant for the generation of mesopores: A step towards the construction of hierarchical metal organic framework
Poonam Rani and **Rajendra Srivastava***
***Inorganic Chemistry Frontiers* 2018**, *5*, 2856-2867. (**Impact factor = 6.0**)

[118] Flower-Shaped Self-Assembled Ni0.5Cu0.5Co2O4 Porous Architecture: A Ternary Metal Oxide as a High-Performance Charge Storage Electrode Material
Subhajyoti Samanta, Arpan Nayak, Aniruddha Mukherji, Debabrata Pradhan, Biswarup Satpati, **Rajendra Srivastava***
***ACS Applied Nano Materials* 2018**, *1*, 5812-5822. **(ACS Applied Materials and Interfaces for which IF = 8.1 was split into four sub sections for which the impact factor is yet to be announced).**

[117] Selective Oxidation of Biomass-Derived Alcohols and Aromatic and Aliphatic

Alcohols to Aldehydes with O_2/Air Using a RuO_2-Supported Mn_3O_4 Catalyst

Bhaskar Sarmah and **Rajendra Srivastava***

***ACS Omega* 2018**, *3*, 7944−7954 (Impact factor = 2.9)

[116] An efficient halometallate ionic liquid functionalized mesoporous ZSM-5 for the reduction of carbon-carbon multiple bonds

Bhaskar Sarmah, Rajkumar kore and **Rajendra Srivastava***

***Inorganic Chemistry Frontiers* 2018**, *5*, 1618-1621 (**Impact factor = 6.0**)

[115] Double metal ions exchanged mesoporous zeolite as an efficient electrocatalyst for alkaline water oxidation: Synergy between Ni-Cu and their contents in catalytic activity enhancement

Subhajyoti Samanta, Santimoy Khilari, Kousik Bhunia, Debabrata Pradhan, Biswarup Satpati, and **Rajendra Srivastava***

***Journal of Physical Chemistry C*, 2018**, *122*, 10725–10736 (Impact factor = 4.2).

[114] One-Pot Tandem Conversion of Monosaccharide and Disaccharide to 2,5-Diformylfuran using Ru Nanoparticles Supported H-Beta Catalyst.

Bhaskar Sarmah, Biswarup Satpati, and Rajendra Srivastava*

***Catalysis Science & Technology*, 2018**, *8*, 2870-2882. (**Impact factor = 5.7**)

[113] An efficient and sustainable catalytic reduction of carbon-carbon multiple bonds, aldehydes, and ketones using Cu nanoparticles decorated metal-organic framework.

Ashish Kumar Kar and Rajendra Srivastava*

***New Journal of Chemistry*, 2018**, 42, 9557-9567 (Impact factor = 3.3)

[112] Integration of metal-organic framework with zeolite: A highly sustainable composite catalyst for the synthesis of γ-valerolactone and coumarins**.**

Poonam Rani and Rajendra Srivastava*

***Sustainable Energy & Fuel,* 2018**, *2*, 1287–1298 (Impact factor = 5.5)

[111] Ni and Cu ion-exchanged nanostructured mesoporous zeolite: A noble metal free, efficient, and durable electrocatalyst for alkaline methanol oxidation reaction

Subhajyoti Samanta, Kousik Bhunia, Debabrata Pradhan, Biswarup Satpati, and **Rajendra Srivastava***

***Materials Today Energy* 2018,** *8*, 45-56. (Impact factor = 5.6)

[110] CN bond formation by the activation of alkenes and alkynes using Cu present in the framework and extra-framework of aluminophosphate

Abhinav Kumar, Bhaskar Sarmah, and **Rajendra Srivastava**[*]

Catalysis Communications 2018, 109, 43-49. (Impact factor = 3.6)

[109] Electro-elastoviscous response of polyaniline functionalized nano-porous zeolite based colloidal dispersions

Ankur Chattopadhyay, Poonam Rani, **Rajendra Srivastava**, and Purbarun Dhar

Journal of Colloid and Interface Science, **2018,** 519, 242-254. (**Impact factor = 7.5**)

[108] Palladium–poly (ionic liquid) membranes for permselective sonochemical flow catalysis

M Wilson, R Kore, AW Ritchie, RC Fraser, SK Beaumont, **R Srivastava**, JPS Badyal

Colloids and Surfaces A : Physicochemical and Engineering Aspects **2018,** *545*, 78-85. (Impact factor = 4.0)

[107] $NiCuCo_2O_4$ supported Ni-Cu ion-exchanged mesoporous zeolite heteronano architecture: An efficient, stable, and economical non-precious electrocatalyst for methanol oxidation

Subhajyoti Samanta, Kousik Bhunia, Debabrata Pradhan, Biswarup Satpati, **Rajendra Srivastava**[*]

ACS Sustainable Chemistry & Engineering **2018**, *6*, 2023-2036**.** (**Impact factor = 7.6**)

[106] Stimulating the visible light catalytic activity of Bi_2MoO_6 nanoplates by embedding carbon dots for the efficient oxidation, cascade reaction, and photoelectrochemical O_2 evolution

Subhajyoti Samanta, Santimoy Khilari, and **Rajendra Srivastava***

ACS Applied Nano Materials **2018,** *1*, 426-441 **(ACS Applied Materials and Interfaces for which IF = 8.1 was split into four sub sections for which the impact factor is yet to be announced).**

[105] Synthesis and applications of ordered and disordered mesoporous zeolites: Present and future prospective

Rajendra Srivastava

Catalysis Today **2018**, 309, *172-188* (Impact factor = 5.8)

Year 2017

[104] Octahedral MnO_2 molecular sieve decorated Meso-ZSM-5 catalyst for eco-friendly synthesis of pyrazoles and carbamates

Bhaskar Sarmah and **Rajendra Srivastava***

Industrial and Engineering Chemistry Research **2017,** *56*, 15017-15029. **(Impact factor = 3.6)**

[103] Tailoring the catalytic activity of metal organic framework by tuning the metal centre and basic functional sites

Poonam Rani and **Rajendra Srivastava***

New Journal of Chemistry **2017,** *41, 8166-8177.* **(Impact factor = 3.3)**

[102] Activation and utilization of CO_2 using ionic liquid or amine functionalized basic nanocrystalline zeolites for the synthesis of cyclic carbonates and quinazoline-2,4(1H,3H)-dione

Bhaskar Sarmah and **Rajendra Srivastava***

Industrial and Engineering Chemistry Research **2017**, *56, 8202-8215.* **(Impact factor = 3.6)**

[101] Thermal catalysis vs. photocatalysis: A case study with $FeVO_4$/g-C_3N_4 nanocomposites for the efficient activation of aromatic and benzylic C-H bonds to oxygenated products

Subhajyoti Samanta, **Rajendra Srivastava***

Applied Catalysis B: Environmental **2017**, *218, 621-636.* **(Impact factor = 16.6)**

[100] A novel method to introduce acidic and basic bi-functional sites in the graphitic carbon nitride for the sustainablecatalysis: Cycloaddition, esterification, and transesterification reactions

Subhajyoti Samanta, **Rajendra Srivastava***

Sustainable Energy Fuels **2017,** *1*, 1390-1404. **(Impact factor = 5.5)**

[99] Natural Template Mediated Sustainable Synthesis of Nanocrystalline Zeolite with Significantly Improved Catalytic Activity

Poonam Rani, Biswarup Satpati, Rajendra Srivastava*

ChemistrySelect **2017**, *2*, 2870-2879. (Impact factor = 1.8)

[98] Magnetic recyclable microcomposite silica-steel core with TiO_2 nanocomposite shell photocatalysts for sustainable water purification

M Wilson, C.Y.C. Cheng, G. Oswald, R Srivastava, JPS Badyal

Colloids and Surfaces A: Physicochemical and Engineering Aspects **2017**, *523*, 27-37. (Impact factor = 4.0)

[97] An efficient, visible light driven, selective oxidation of aromatic alcohols and amines with O_2 using $BiVO_4$/g-C_3N_4 nanocomposite: A systematic and comprehensive study toward the development of a photocatalytic process

S. Samanta, S. Khilari, D. Pradhan, and R. Srivastava*

ACS Sustainable Chemistry & Engineering **2017,** *5*, 2562-2577.

(Impact factor = 7.6)

[96] Recyclable palladium catalyst cloths for carbon-carbon coupling reactions

M Wilson, R Kore, RC Fraser, SK Beaumont#, R Srivastava#, JPS Badyal#

Colloids and Surfaces A: Physicochemical and Engineering Aspects, **2017**, *520***,** 788-795. (Impact factor = 4.0)

#These authors have made equal contribution.

[95] Highly efficient and recyclable basic mesoporous zeolite catalyzed condensation, hydroxylation, and cycloaddition reactions

B Sarmah, B Satpati, **R Srivastava***

Journal of Colloid and Interface Science, **2017**, 493, 307-316. **(Impact factor = 7.5)**

[94] Cu nanoparticles decorated Cu organic framework based efficient and reusable heterogeneous catalysts for coupling reactions

P. Rani, P. Philips, R. Srivastava

Molecular Catalysis **2017,** 433, 100-110. (Impact factor = 3.7)

[93] Highly efficient and recyclable basic ionic liquids supported on SBA-15 for the synthesis of substituted styrenes, carbinolamides, and napthopyrans.

B. Sarmah, R. Srivastava

Molecular Catalysis **2017,** 427, 62-72**.** (Impact factor = 3.7)

Year 2016

[92] Cu ion-exchanged and Cu nanoparticles decorated mesoporous ZSM-5 catalysts for the activation and utilization of phenylacetylene in a sustainable chemical synthesis.
B. Sarmah, B. Satpati, R. Srivastava
RSC Advances, **2016**, *6*, 87066-87081. (Impact factor = 3.1)

[91] $CuCo_2O_4$ based economical electrochemical sensor for the nanomolar detection of hydrazine and metol.
S. Samanta, R. Srivastava
Journal of Electroanalytical Chemistry, **2016**, *777*, 48-57. (Impact factor = 3.8)

[90] ZrO_2 supported Nano-ZSM-5 nanocomposite material for the nanomolar electrochemical detection of metol and bisphenol A
Balwinder Kaur, Biswarup Satpati, and **Rajendra Srivastava**[*]
RSC Advances **2016**, *6*, 65736-65746. (Impact factor = 3.1)

[89] Highly efficient and recyclable copper based ionic liquid catalysts for amide synthesis
Poonam Rani, **Rajendra Srivastava**[*]
New Journal of Chemistry **2016**, *40*, 7162-7170. (Impact factor = 3.3)

[88] One-Step Dual Template Mediated Synthesis of Nanocrystalline Zeolites of Different Framework Structure
Poonam Rani, **Rajendra Srivastava**[*] and Biswarup Satpati
Crystal Growth and Design **2016**, *16*, 3323-3333. (Impact factor = 4.1)

[87] Simultaneous determination of epinephrene and paracetamol at copper-cobalt oxide spinel decorated nanocrystalline zeolite modified electrodes
Subhjyothi Samantha and **Rajendra Srivastava**[*]
Journal of Colloids and Interface Science **2016**, 475, 126-135. **(Impact factor = 7.5)**

[86] Highly Efficient Silver Nanoparticles Supported Nanocrystalline Zirconosilicate Catalyst for the Epoxidation and Hydration Reactions
Bhaskar Sarmah, **Rajendra Srivastava**[*] and Biswarup Satpati
ChemistrySelect **2016**, *1*, 1047-1056. (Impact factor = 1.8)

[85] Highly Efficient CeO_2 Decorated Nano-ZSM-5 Catalyst for Electrochemical Oxidation of Methanol

Balwinder Kaur, **Rajendra Srivastava**[*] and Biswarup

ACS Catalysis **2016,** *6*, 2654-2663. **(Impact factor = 12.4)**

[84] Copper nanoparticles decorated polyaniline–zeolite nanocomposite for the nanomolar simultaneous detection of hydrazine and phenylhydrazine

Balwinder Kaur, **Rajendra Srivastava**[*] and Biswarup Satpati

Catalysis Science and Technology **2016,** *6*, 1134-1145. **(Impact factor = 5.7).**

Year 2015

[83] Green and Sustainable Tandem Catalytic Approach for Fine-Chemicals Synthesis Using Octahedral MnO_2Molecular Sieve: Catalytic Activity versus Method of Catalyst Synthesis

Bhaskar Sarmah, **Rajendra Srivastava**[*], Pandian Manjunathan, and Ganapati V. Shanbhag

ACS Sustainable Chemistry Engineering **2015**, *3*, 2933–2943. **(Impact factor = 7.6)**

[82] A novel gold nanoparticle decorated nanocrystalline zeolite based electrochemical sensor for the nanomolar simultaneous detection of cysteine and glutathione

Balwinder Kaur, **Rajendra Srivastava**[*] and Biswarup Satpati

RSC Advances **2015,** *5*, 95028-9503 (Impact factor = 3.1)

[81] Biomineralization of hydroxyapatite in silver ion-exchanged nanocrystalline ZSM-5 zeolite using simulated body fluid

Balwinder Kaur, Rajendra Srivastava, Biswarup Satpati, Kanthi Kiran Kondepudi, Mahendra Bishnoi,

Colloids and Surfaces B: Biointerfaces **2015,** *135*, 201-208. (Impact factor = 4.4)

[80] Silver nanoparticle decorated polyaniline–zeolite nanocomposite material based non-enzymatic electrochemical sensor for nanomolar detection of lindane

Balwinder Kaur, **Rajendra Srivastava*** and Biswarup Satpati
***RSC Advances* 2015**, 5, 57657-57665. (Impact factor = 3.1)

[79] A polyaniline–zeolite nanocomposite material based acetylcholinesterase biosensor for the sensitive detection of acetylcholine and organophosphates
Balwinder Kaur, **Rajendra Srivastava***
***New Journal of Chemistry* 2015**, 39, 6899-6906. (Impact factor = 3.3)

[78] A Novel Nanocrystalline Titanosilicate-Acetylcholinesterase Electrochemical Biosensor for the Ultra Trace Detection of Toxic Organophosphate Pesticides
Balwinder Kaur, **Rajendra Srivastava***, and Biswarup Satpati
***ChemElectroChem* 2015,** 2, 1164-1173. (Impact factor = 4.2)

[77] Ultratrace detection of toxic heavy metal ions found in water bodies using hydroxyapatite supported nanocrystalline ZSM-5 modified electrodes
Balwinder Kaur, **Rajendra Srivastava***, and Biswarup Satpati
***New Journal of Chemistry* 2015**, 39, 5137-5149. (Impact factor = 3.3)

[76] Nucleophilic addition of amines, alcohols, and thiophenol with epoxide/olefin using highly efficient zirconium metal-organic framework heterogeneous catalyst
Poonam Rani **and Rajendra Srivastava***
***RSC Advances* 201**5, 5, 28270-28280. (Impact factor = 3.1)

[75] Nanocrystalline ZSM-5 based bi-functional catalysts for two steps and three steps tandem reactions
Rajendra Srivastava*, Bhaskar Sarmah, and Biswarup Satpati
***RSC Advances* 2015**, *5*, 25998-26006. (Impact factor = 3.1)

[74] Simultaneous determination of epinephrine, paracetamol, and folic acid using transition metal ion-exchanged polyaniline-zeolite organic-inorganic hybrid materials
Balwinder Kaur, Biswarup Satpati, and **Rajendra Srivastava***
***Sensors & Actuators: B. Chemical* 2015**, *211*, 476-488. **(Impact factor = 7.1)**

[73] Synthesis of industrially important aromatic and heterocyclic ketones using hierarchical ZSM-5 and Beta zeolites
Rajkumar Kore, Biswarup Satpati, and **Rajendra Srivastava***
***Applied Catalysis A: Chemical* 2015**, 493, 129-141. (Impact factor = 5.0)

[72] Simple and Economical Synthesis of Alkyl Phenyl Ethers by the Reaction of Phenols and Alkyl Esters Using Nanocrystalline Beta

Bhaskar Sarmah and **Rajendra Srivastava**[*]

ACS Sustainable Chemistry and Engineering **2015,** 3, 210-215. **(Impact factor = 7.6)**

[71] Synthesis of $NiCo_2O_4$/Nano-ZSM-5 nanocomposite material with enhanced electrochemical properties for the simultaneous determination of ascorbic acid, dopamine, uric acid and tryptophan

Balwinder Kaur, Biswarup Satpati, and **Rajendra Srivastava**[*]

New Journal of Chemistry **2015,** 39, 1115-1124. (Impact factor = 3.3)

Year 2014

[70] ZSM-5 zeolite nanosheets with remarkably improved catalytic activity synthesized using a new class of structure directing agents

Rajkumar Kore, **Rajendra Srivastava***, Biswarup Satpati

Chemistry - A European Journal **2014**, 20, 11511-11521. **(Impact factor = 4.9)**

[69] Cu(I) metal organic framework catalyzed C-C and C-N coupling reactions

Poonam Rani and **Rajendra Srivastava***

Tetrahedron Letters **2014**, 55, 5256-5260. (Impact factor = 2.3)

[68] Simultaneous electrochemical determination of nanomolar concentrations of aminophenol isomers using nanocrystalline zirconosilicate modified carbon paste electrode

Balwinder Kaur and **Rajendra Srivastava***

Electrochimica Acta **2014,** 141, 61-71. **(Impact factor = 6.2)**

[67] Synthesis of ionic liquids coated nanocrystalline zeolite materials and their application in the simultaneous determination of adenine, cytosine, guanine, and thymine

Balwinder Kaur and **Rajendra Srivastava***

Electrochimica Acta **2014,** 133, 428-439. **(Impact factor = 6.2)**

[66] Ionic liquids coated Fe_3O_4 based inorganic–organic hybrid materials and their application in the simultaneous determination of DNA bases

Balwinder Kaur and **Rajendra Srivastava***

Colloids and Surfaces B: Biointerfaces **2014,** 118, 179-187. (Impact factor = 4.4)

[65] Selective, nanomolar electrochemical determination of environmental contaminants dihydroxybenzene isomers found in water bodies using nanocrystalline zeolite modified carbon paste electrodes

Balwinder Kaur and **Rajendra Srivastava***

Electroanalysis **2014,** 26, 1739-1750. (Impact factor = 2.5)

[64] Nanocrystalline Metallosilicate Modified Electrodes for the Simultaneous, Sensitive, and Selective Determination of Riboflavin, Rutin, and Pyridoxine

Balwinder Kaur and **Rajendra Srivastava***

Electroanalysis **2014,** 26, 1078-1097. (Impact factor = 2.5)

[63] Highly efficient and green chemical synthesis of imidazolyl alcohols and N-imidazolyl functionalized β-amino compounds using nanocrystalline ZSM-5 catalysts

Rajkumar Kore, Biswarup Satpati, and **Rajendra Srivastava***

Applied Catalysis A: General **2014,** *477, 8-17.* (Impact factor = 5.0)

[62] Facile preparation of β-$Ni(OH)_2$-$NiCo_2O_4$ hybrid nanostructure and its application in the electro-catalytic oxidation of methanol

M.U. Anu Prathap, Biswarup Satpati, and **Rajendra Srivastava***

Electrochimica Acta **2014**, *130, 368-380.* **(Impact factor = 6.2)**

[61] Simultaneous determination of ascorbic acid, dopamine, uric acid, and tryptophan by nanocrystalline ZSM-5 modified electrodes

Balwinder Kaur and **Rajendra Srivastava***

Journal of Nanoscience and Nanotechnology **2014,** 14, 6539-6550. (Impact factor = 1.1)

Year 2013

[60] Highly efficient nanocrystalline zirconosilicate catalysts for the aminolysis, alcoholysis, and hydroamination reactions

Rajkumar Kore, **Rajendra Srivastava***, and Biswarup Satpati

ACS Catalysis **2013,** *3*, 2891-2904. **(Impact factor = 12.4)**

[59] Simultaneous detection of guanine, adenine, thymine, and cytosine at polyaniline/MnO_2 modified electrode

Anu Prathap M.U., **Rajendra Srivastava***, and Biswarup Satpati

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[58] Facile preparation of $Ni(OH)_2$–MnO_2 hybrid material and its application in the electrocatalytic oxidation of hydrazine

M.U. Anu Prathap, V. Anuraj, Biswarup Satpati, **Rajendra Srivastava***

Journal of Hazardous Materials **2013**, *262*, 766-774 **(Impact factor = 9.0)**

[57] Transition-Metal-Exchanged Nanocrystalline ZSM-5 and Metal-Oxide-Incorporated SBA-15 Catalyzed Reduction of Nitroaromatics

Balwinder Kaur, Mahesh Tumma, and **Rajendra Srivastava***

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