

COMPLETE LIST OF PUBLICATIONS

PATENTS (Total No. 13)

1. Saudi Arabian Patent, Application No 516371948, (2018)

A single-step catalytic process for conversion of naphtha to diesel range hydrocarbons

N Viswanadham, Peta Sreenivasulu, Sandeep K Saxena, Rajeev Panwar, Devaki Nandan, Jagdish Kumar

2. Russian Patent No. 2648239, (2018)

A single -step catalytic process for conversion of naphtha to diesel range hydrocarbons

N Viswanadham, Peta Sreenivasulu, Sandeep K Saxena, Rajeev Panwar, Devaki Nandan, Jagdish Kumar

3. Australia Patent Application number 013342997 (2017)

A single -step catalytic process for conversion of naphtha to diesel range hydrocarbons

N Viswanadham, Peta Sreenivasulu, Sandeep K Saxena, Rajeev Panwar, Devaki Nandan, Jagdish Kumar

4. US 9,598,649 (Date of grant 21 March 2017)

A single-step catalytic process for conversion of naphtha to diesel range hydrocarbons,

N. Viswanadham, Peta Sreenivasulu, Sandeep K Saxena, Rajeev Panwar, Devaki Nandan, Jagdish Kumar

5. US 9267081 (Date of grant 23 Feb . 2016)

Catalyst and process for the conversion of bio-ethanol in to gasoline

N. Viswanadham, Sandeep K. Saxena

6. South Africa, Patent No. 2015/03452 (Date of grant 27-1-2016)

A single-step catalytic process for conversion of naphtha to diesel range hydrocarbons

N. Viswanadham, Peta Sreenivasulu, Sandeep K Saxena, Rajeev Panwar, Devaki Nandan, Jagdish Kumar

7. South Korean Patent, Application No 10-2015-701527 (Dt. 09.06.2015)

A single-step catalytic process for conversion of naphtha to diesel range hydrocarbons

N Viswanadham, Peta Sreenivasulu, Sandeep K Saxena, Rajeev Panwar, Devaki Nandan, Jagdish Kumar

8. WO 2014 /073006 A1 (Date of grant 15 May 2014)

A single step catalytic process for the conversion of naphtha to diesel range hydrocarbons

N.Viswanadham, P. Sreenivasulu, Sandeep K Saxena, Rajiv Panwar, Devki Nandan, Jagdish Kumar

9. I. P. A. No 3485DEL2012 (Dt. 8-11-2012)

A single step catalytic process for the conversion of naphtha to diesel range hydrocarbons

N.Viswanadham, P. Sreenivasulu, Sandeep K Saxena, Rajiv Panwar, Devki Nandan, Jagdish Kumar

10. I.P.A. (Ref. No. 0235NF 2011) Submitted for Indian Patent

A novel zeolite catalyst for the production of oxygenates from glycerol
N. Viswanadham, Sandeep K. Saxena

11. I.P.A. Application Serial: 13/619,608 Issued: Mar 20, 2014

Catalyst and process for the conversion of bio-ethanol into gasoline
N. Viswanadham, Sandeep K Saxena

12. Indian Pat. Appl. (2011) 0648DEL 2011

Catalyst and process for the isomerization of naphtha
N. Viswanadham, M.O. Garg, Sandeep K Saxena, Amit Sharma, Rajiv Panwar, Jagdish Kumar

13. Indian Patent 246902 (Grant 21 Feb.2011)

A process for the preparation of a novel zeolite catalyst useful for the hydro-isomerization of light alkanes
Nagabhatla Viswanadham, Sandeep K Saxena, Sneha Chopra, Lalji Dixit

Papers/articles in international/national journals/magazine& papers in international/ national symposium/workshop

RESEARCH PAPERS

INTERNATIONAL (Total No. 32)

1. Single- pot synthesis of ordered nanoporous amorphous H-Zn-Aluminosilicate for bulky molecular catalysis
Jitendra Diwakar, Nagabhatla Viswanadham, Saurabh Kumar, Adarsh Kumar, **Sandeep K. Saxena**
Sustainable Energy & Fuels (2018) Article in press
2. Evaluation of synthesized green carbon catalyst from waste date pits for tertiary butylation of phenol
FarrukhJamil, Ala'a H.Al-Muhtaseb, Mu Naushad, MahadBaawain, Abdullah Al-Mamun,
Sandeep K. Saxena, N.Viswanadham
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3. Liquid-phase solvent-less reactions for value addition of glycerol and phenols over nano porous aluminosilicates
Jitendra Diwakar, Nagabhatla Viswanadham, **Sandeep K. Saxena**, Saurabh Kumar, Ala'a H.Al Muhtaseb
Materials Today Communications, 15 (2018) 260-268
4. Valorization of waste “date seeds” bio-glycerol for synthesizing oxidative green fuel additive
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Journal of Cleaner Production, 165 (2017), 1090-1096
5. Facile synthesis of bio-fuel from glycerol over zinc aluminium phosphate Nanoplates
N. Viswanadham, **Sandeep K. Saxena**, P. Sreenivasulu

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6. Effect of zeolite pore morphology on solvent-less alkylation of benzene with 1-hexene
Sandeep K. Saxena, N. Viswanadham, Ala'a H. Al-Muhtaseb
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7. Cu-functionalized nano crystalline ZSM-5 as efficient catalyst for selective oxidation of toluene
N. Viswanadham, *Sandeep K. Saxena*, Ala'a H. Al-Muhtaseb
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8. Synthesis of REY zeolite for formulation of FCC catalyst and the catalytic performance in cracking of n-hexadecane
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11. Enhanced selective oxidation of benzyl alcohol to benzaldehyde on mesopore created mordenite catalyst
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12. Facile synthesis of crystalline nanoporous $Mg_3(PO_4)_2$ and its application to aerobic oxidation of alcohols
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13. Carbonized glycerol nanotubes as efficient catalyst for biofuel production
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14. Enhanced production of high octane oxygenates from glycerol etherification using the desilicated BEA zeolite
Sandeep K. Saxena, Ala'a H. Al-Muhtaseb, Nagabhatla Viswanadham
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15. Nano porous hydroxyapatite as a bi-functional catalyst for bio-fuel production
N. Viswanadham, Suman Debnath, P. Sreenivasulu, Devaki Nandan, *Sandeep K. Saxena*, Ala'a H. Al-Muhtaseb
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16. A single step catalytic process for the production of higher range hydrocarbon fuel stock from naphtha
N. Viswanadham, P. Sreenivasulu, Amit Sharma, Rajeev Panwar, *Sandeep K. Saxena*, M.O. Garg

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19. Facile synthesis of mesoporous aluminosilicate nano particles for selective production of N-Benzylidenaniline in solvent-free reaction of aniline with benzyl alcohol
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20. Enhanced production of high octane gasoline blending stock from methanol with improved catalyst life on nano-crystalline ZSM-5 catalyst
Sandeep K. Saxena, Nagabhatla Viswanadham, Ala'a H. Al-Muhtaseb
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21. Break - through mesopore creation in BEA and its enhanced catalytic performance in solvent-free liquid phase tert-butylation of phenol
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22. Synthesis of hierarchical ZSM -5 using glucose as templating precursor
Devaki Nandan, *Sandeep K. Saxena*, Nagabhatla Viswanadham
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23. Selective production of green gasoline by catalytic conversion of Jatropha oil
Sandeep K. Saxena, Nagabhatla Viswanadham
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24. Morphology structural and porosity studies of lab-synthesized nano and micro crystalline zeolites
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25. Studies on textural properties of lanthanum-exchanged Y zeolites as promising materials for value upgradation of Jatropha oil
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26. Cracking and isomerization functionalities of bi-metallic zeolites for naphtha value upgradation
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27. Octane boosting studies of naphtha over noble metal loaded zeolite catalysts
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31. Catalytic performance of nano crystalline H-ZSM-5 in ethanol to gasoline (ETG) reaction.
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32. Facile synthesis of a sulfonated carbon-silica-meso composite and mesoporous silica.
 Devaki Nandan, Peta Sreenivasulu, *Sandeep K. Saxena* and Nagabhatla Viswanadham
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37. Studies on octane boosting of industrial feedstock on Pt/H-BEA zeolite.
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2. Biodegradation of waste plastic material : A challenging solution.
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3. Heavy metal toxicity effect on body metabolism activity : A Review.
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4. Biological Effect of heavy metal in drinking water of Shiwalik & Westron U.P. region in India.

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6. Environmental approach: Synthesis of alum from waste aluminium foils material.
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7. Reformulated Gasoline: Catalytic conversion of olefins in light cracked gasoline
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- Gasoline from bio oil : new applications for refineries
Sandeep K. Saxena
12th International Oil and Gas Conference and Exhibition (Petrotech) 2016, 5-7th December 2016, New Delhi
- Development of zeolite catalyst for the utilization of bio-ethanol as green transportation fuel
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- Breakthrough increase in the production of bio-fuel blending stock from bio diesel glycerol
Sandeep K. Saxena, N. Viswanadham
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- A novel catalytic process for the utilization of bio-acetone into green transportation fuel
Sandeep K. Saxena, Nagabhatla Viswanadham, Ala'a H. Al-Muhtaseb
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- A single step catalytic process for the direct conversion of naphtha to middle distillates
N. Viswanadham, P. Sreenivasulu, Amit Sharma, Rajeev Panwar, Sandeep K. Saxena,
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- A novel approach for the utilization of bio-acetone for cleaner gasoline production
Sandeep K. Saxena, N.Viswanadham, M.O. Garg
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- A single step catalytic process for the direct conversion of naphtha to higher range hydrocarbons
N. Viswanadham, P. Sreenivasulu, Amit Sharma, Rajeev Panwar, Sandeep K. Saxena,
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- Conversion of biodiesel by-product glycerol into fuel ethers over solid acid catalysts
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