

CURRICULUM VITAE

PERSONAL DATA

Name	Mohamed Nady Abd El-Hameed Ibrahim
Nationality	Egyptian
Position	Assistant Professor of Physical Chemistry
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EDUCATION

Year	Academic Degree	Institution
2007	Bachelor of Chemistry	Chemistry Department, Faculty of Science, Assiut University, Egypt
2013	Master in Physical Chemistry	Chemistry Department, Faculty of Science, Assiut University, Egypt
2017	PhD in Physical Chemistry	Chemistry Department, Faculty of Science, Assiut University, Egypt

WORK EXPERIENCE

Period	Position	Address
November, 2007- January 2013	Demonstrator	Chemistry Department, Faculty of Science, Assiut University, Egypt
March 2013- February 2017	Assistant Lecturer	Chemistry Department, Faculty of Science, Assiut University, Egypt
March 2017-June 2022	Assistant Professor of Physical Chemistry	Chemistry Department, Faculty of Science, Assiut University, Egypt
July 2022-April 2024	Associate Professor of Physical Chemistry	Chemistry Department, Faculty of Science, Assiut University, Egypt
April 2024- till Now	Assistant Professor of Physical Chemistry	Department of Chemistry, College of Science, Imam Mohammad Ibn Saud Islamic University, Riyadh, Saudi Arabia

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RESEARCH INTERESTS

- Heterogenous Catalysis
- Preparation of nanomaterial-based catalysts.
- Preparation of metal-organic framework (MOF) and their adsorptive and catalytic applications.
- Wastewater treatments.
- Characterization of the materials by various methods including XRD, ICP, SEM, TEM, spectroscopy (NMR, IR, UV-Vis.), surface area measurements, elemental analyses, conductivity measurements, magnetic susceptibility, TPD&TPR measurements, XRF and thermal analysis.

LIST of SARED PROJECTS

1. Synthesis of dimethyl ether as a future biofuel for reduction of gas emissions over novel modified clay catalysts funded by STDF, Egypt, Project ID: 46968) (In Progress).
2. Utilization of Natural Egyptian Clays Instead of Sulfuric Acid in Manufacturing of Esters (funded by STDF, Egypt, Project ID: 3009) (Finished).
3. Using Metakaolin as a Pozzolanic Material for Improving Cement in High Strength Concrete and Sulfate Resistance (funded by CEMEX Company, Egypt).
4. Utilization of black shales as an alternative fuel in cement industry (funded by CEMEX Company, Egypt) (Finished).
5. Development of marketable oil and organic waste absorbing products from indigenous sugar cane waste (Bagasse) (funded by STDF, Egypt, Project ID: 479) (Finished).

AWARDS

- 1- The best Scientific paper in chemistry, Assiut University (2014) (Prof. Dr. Mohamed R. Mahmoud Prize).
- 2- The highest impact factor prize in chemistry, Faculty of Science, Assiut University (2017).
- 3- The best Scientific paper in chemistry, Faculty of Science, Assiut University (2019).

PUBLICATIONS

1. **Mohamed N. Goda**, Abd El-Aziz A. Said, Efficient green synthesis of n-amyl acetate in liquid phase over metal-organic framework catalysts, Journal of Molecular Structure (Accepted Manuscript) 2024.
2. Abd El-Aziz A. Said, **Mohamed N. Goda**, Mohamed Abd El-Wahab, Nadia O. El-Gamal, Mohamed Abd El-Aal, Promoted catalytic performance of sugarcane bagasse ash supported by γ -alumina as efficient, stable, and ecofriendly catalyst for dehydration of methanol to dimethyl ether, Asia-Pacific Journal of Chemical Engineering (Accepted Manuscript) 2024.
3. Abd El-Aziz A. Said, Aya A. Shaban, **Mohamed N. Goda**, Zirconia incorporated aluminum phosphate as efficient microporous nano catalysts for the selective dehydration of methanol into dimethyl ether, Catalysis Letters 154 (2024) 1094-1011.
4. Mohamed Abd El-Aal, **Mohamed N. Goda**, Mohamed Abd El-Wahab, Nadia O. El-Gamal, Abd El-Aziz A. Said, Zirconia-sugarcane bagasse fly ash as a novel solid acid nanocatalyst for selective dehydration of methanol to dimethyl ether, Journal of the Chinese Chemical Society 71(2024) 333-344.
5. **Mohamed N. Goda**, Mohamed Abd El-Aal, Esraa Magdy, Abd El-Aziz A. Said, The catalytic performance of $\text{Fe}_x\text{Mn}_{1-x}\text{WO}_4$ as novel wolframite-type nanocatalysts for the selective dehydration of methanol into dimethyl ether, Molecular Catalysis 547 (2023) 113350.
6. Mohamed Abd El-Aal, Abd El-Aziz A. Said, **Mohamed N. Goda**, Essam A. AboElfadl, Samia M. Makram, $\text{Fe}_3\text{O}_4@ \text{CMC-Cu}$ magnetic nanocomposite as an efficient catalyst for reduction of toxic pollutants in water, Journal of Molecular Liquids 385 (2023) 122317
7. Abd EL Aziz A. Said, Aref A. M. Aly, Atef H. Mostafa, Hazem S. Ahmed , **Mohamed N. Goda**, An approach for application of ozone bleaching and nano-filler loading on quality of papermaking from sorghum bagasse as a promise alternative non-wood fiber, Environmental Progress and Sustainable Energy(2023) Accepted Manuscript.
8. Abd El-Aziz A. Said, A. A. Abu-Sehly, H. Ahmed, A. Z. Mahmoud, **Mohamed N. Goda**, Adsorptive Remediation of Hazardous Crystal Violet Dye using $\text{Ni}_{1-x}\text{Zn}_x\text{Fe}_2\text{O}_4$ Magnetic Nanocomposites, ChemistrySelect 7 (2023) e20220344.
9. Abd El-Aziz A. Said, A. A. Abu-Sehly, H. Ahmed, A. Z. Mahmoud, **Mohamed N. Goda**, Influence of ultrasonic radiation on the structural, magnetic, electrical, and catalytic properties of NiFe_2O_4 nanoparticles, Journal of Materials Science: Materials in Electronics 33 (2022) 16805–16817.
10. Mohamed Abd El-Aal , Abd El-Aziz A. Said, Mohamed H. Abdallah, **Mohamed N. Goda**, Modified natural kaolin clay as an active, selective, and stable catalyst for methanol dehydration to dimethyl ether, Scientific Reports 12 (2022) 9407.

11. **Mohamed N. Goda**, Abd El-Aziz A. Said, Mohamed Abd El-Aal, Mineral acid-activated sugarcane bagasse ash as solid acid catalyst for the liquid phase esterification of acetic acid with n-amyl, benzyl, and n-butyl alcohols, *Journal of Environmental Chemical Engineering* 10 (2022) 107355.
12. Abd El-Aziz A. Said, **Mohamed N. Goda**, Aya. A. Shaban, The Catalytic Performance of Ultrasonically Prepared $AlPO_4$ Nanocatalysts for the Selective Production of Dimethyl Ether from Methanol, *Catalysis Letters* 152 (2022) 821-837.
13. Abd El-Aziz A. Said, Mohamed M. Abd El-Wahab, Nadia O. El-Gamal and **Mohamed N. Goda**, A pronounce approach on the catalytic performance of mesoporous natural silica towards esterification of acetic acid with iso-amyl, benzyl and cinnamyl alcohols, *Journal of the Chinese Chemical Society* 69 (2022) 257-268.
14. Kamal M .S. Khalil, Walaa A. Elhamdy, Mohamed N. Goda, Abd El-Aziz A. Said, Biomass derived P-containing activated carbon as a novel green catalyst/support for methanol conversion to dimethyl ether alternative fuel, *Journal of Environmental Chemical Engineering* 9 (2021) 106572.
15. **Mohamed N. Goda**, Abd El-Aziz A. Said, Hani Nasser Abdelhamid, Highly selective dehydration of methanol over metal-organic frameworks (MOFs)-derived ZnO@Carbon, *Journal of Environmental Chemical Engineering* 9 (2021) 106336.
16. Abd El-Aziz A. Said, **Mohamed N. Goda**, Superior Competitive Adsorption Capacity of Natural Bentonite in the Efficient Removal of Basic Dyes from Aqueous Solutions, *ChemistrySelect* 6 (2021) 2790-2803.
17. Hani N. Abd El-Hamid, **Mohamed N. Goda**, Abd El-Aziz A. Said, Selective dehydrogenation of isopropanol on carbonized metal-organic frameworks, *Nano-Structures & Nano-Objects* 24 (2020) 100605.
18. **Mohamed N. Goda**, Abd El-Aziz A. Said, Mohamed Abd El-Aal, Synthesis, The catalytic performance of ultrasonically prepared $Cu_xCo_{3-x}O_4$ towards CO oxidation at relatively low temperature, *Molecular Catalysis* 494 (2020) 111121.
19. Abd El-Aziz A. Said, Aref. M. A. Aly, **Mohamed N. Goda**, Mohamed Abd El-Aal, Adsorptive remediation of Congo red in aqueous solutions using acid pretreated sugarcane bagasse, *Journal of Polymer and the Environment* 28

(2020) 1129-1137.

20. Abd El-Aziz A. Said, **Mohamed N. Goda**, Mohamed A. Kassem, Promotional Effect of B_2O_3 , WO_3 and ZrO_2 on the Structural, Textural and Catalytic Properties of $FePO_4$ Catalyst Towards the Selective Dehydration of Methanol into Dimethyl Ether, *Catalysis Letters* 150 (2020) 1714-1728.
21. **Mohamed N. Goda**, Hani Nasser Abdelhamid, Abd El-Aziz A. Said, Zirconium Oxide Sulfate-Carbon ($ZrOSO_4@C$) Derived from Carbonized UiO-66 for Selective Production of Dimethyl Ether, *ACS Applied Materials & Interfaces* 12 (2020) 646-653.
22. Abd El-Aziz A. Said, **Mohamed N. Goda**, Green synthesis of bio-ethyl acetate over Egyptian acidic natural red clay as a highly active, selective and eco-friendly catalyst, *Chinese Journal of Chemical Society*, 67 (2020) 567-575.
23. Abd El-Aziz A. Said, Mohamed M. Abd El-Wahab, **Mohamed N. Goda**, Nadia O. El-Gamal, Green synthesis of n-butyl acetate in the liquid phase using natural silica as a novel, highly efficient and stable catalyst, *Egyptian Sugar Journal* 13 (2019) 85-103.
24. Abd El-Aziz A. Said, **Mohamed N. Goda**, Synthesis, Characterization and Catalytic Activity of Nanocrystalline $Ce_2(MoO_4)_3/SiO_2$ as a Novel Catalyst for the Selective Production of Anhydrous Formaldehyde from Methanol, *Catalysis Letters* 149 (2019) 419-430.
25. Abd El-Aziz A. Said, Mohamed T. Heikal, **Mohamed N. Goda**, Characterization and catalytic performance of Basaltic dust as an efficient catalyst towards the liquid-phase esterification of acetic acid with n-butanol. *Chinese Journal of Chemical Society* 66 (2019) 725-733.
26. Abd El-Aziz A. Said, **Mohamed N. Goda**, Superior catalytic performance of $CaMoO_4$ catalyst in direct dehydrogenation of methanol into anhydrous formaldehyde, *Chemical Physics Letters* 703 (2018) 44-51.
27. Abd El-Aziz A. Said, Aref M. A. Aly, **Mohamed N. Goda**, Mohamed Abd El-Aal, Mohamed Abdelazim, Modified sugarcane bagasse with tartaric acid for removal of diazonium blue from aqueous solutions. *Journal of polymer and the Environment* 26 (2018) 2424-2433.
28. Abd El-Aziz A. Said, Mohamed M. Abd El-Wahab, and **Mohamed N. Goda**, Selective synthesis of acetone from isopropyl alcohol over active and stable

- CuO–NiO nanocomposites at relatively low-temperature Egyptian Journal of Basic and Applied Sciences, 3 (2016) 357-365.
29. Abd El-Aziz A.Said, Mohamed M. Abd El-Wahab, and **Mohamed N. Goda**, Synthesis and characterization of pure and (Ce, Zr, Ag) doped mesoporous CuO-Fe₂O₃ as highly efficient and stable nanocatalysts for CO oxidation at low temperature, Applied Surface Science 390 (2016) 649-665.
30. Abd El-Aziz A. Said, Mohamed M. Abd El-Wahab, S. A. Soliman and **Mohamed N. Goda**, Synthesis and characterization of mesoporous Fe–Co mixed oxide nanocatalysts for low temperature CO oxidation, Process Safety and Environmental Protection 102 (2016) 370-384.
31. Abd El-Aziz A.Said, Mohamed M. Abd El-Wahab, Soliman A. Soliman and **Mohamed N. Goda**, Synthesis and structural characterization of nano CuO-NiO mixed oxides. Nanoscience and Nanoengineering 2 (1) (2014) 17-28.
32. Abd El-Aziz A. Said, Aref A. M. Aly, Mohamed M. Abd El-Wahab, Aly. A. Abd El-Hafez and **Mohamed N. Goda**, "A new approach on the catalytic synthesis of n-butyl acetate over Egyptian natural clay", The Seventh Tokyo Conference on Advanced Catalytic Science and Technology (TOCAT7), 1-6, June 2014, short communication.
33. Abd El-Aziz A. Said, Aref A. M. Aly, Mohamed M. Abd El-Wahab, Soliman A. Soliman, Aly. A. Abd El-Hafez, V. Helmey and **Mohamed N. Goda**, Application of modified bagasse as a biosorbent for reactive dyes removal from industrial wastewater. Journal of Water Resource and Protection 5 (2013) 10-17.
34. Abd El-Aziz A. Said, Aref A. M. Aly, Mohamed M. Abd El-Wahab, Soliman A. Soliman, Aly. A. Abd El-Hafez, V. Helmey and **Mohamed N. Goda**, An efficient biosorption of direct dyes from industrial wastewaters using pretreated sugarcane bagasse. Energy and Environmental Engineering 1(1) (2013) 10-16.
35. Abd El-Aziz A. Said, Aref A. M. Aly, Mohamed M. Abd El-Wahab, Soliman A. Soliman, Aly. A. Abd El-Hafez, V. Helmey and **Mohamed N. Goda**, Potential application of propionic acid modified sugarcane bagasse for removal of basic and acid dyes from industrial wastewater, Resources and Environment 2(3) (2012) 93-99.
36. Aref A. M. Aly, Abd El-Aziz A. Said, Ali A. Abd El-Hafez, **Mohamed N. Goda**, Victor Helmey, Acid pretreated bagasse as a suitable biosorbent for direct red

81 removals, The 2010 International conference on environmental engineering and applications (ICEEA 2010, Singapore), proceedings (2010) 151- 153.