

# SCIENTIFIC CURRICULUM VITAE



## I. Personal Information

|                   |                                                                                                                                                  |                                       |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| Name              | NGUYEN THI TO LOAN                                                                                                                               |                                       |
| Gender            | Female                                                                                                                                           |                                       |
| Date of birth     | August 19, 1981                                                                                                                                  |                                       |
| Place of birth    | Hoang Dieu Commune – Chuong Mi District – Ha Noi city                                                                                            |                                       |
| Hometown          | Hoang Dieu Commune – Chuong Mi District – Ha Noi city                                                                                            |                                       |
| Position          | Faculty of Chemistry, Thai Nguyen University of Education                                                                                        |                                       |
| Degree            | Doctor                                                                                                                                           | Year: 2011 Major: Inorganic Chemistry |
| Scientific title  | Associate Professor                                                                                                                              | Accreditation year: 2016              |
| Teaching subjects | Inorganic Chemistry, Rare elements Chemistry, Some problems of inorganic chemistry in fostering good student in the school.                      |                                       |
| Research area     | Inorganic Chemistry, Synthesis of nano materials, studies on their structure, properties and application-orientation in environmental treatment. |                                       |
| Foreign Language  | English.                                                                                                                                         |                                       |
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## II. Qualifications

- 2003: B.Sc in Chemistry in Education, Thai Nguyen University of Education.
- 2005: M.Sc in Analytical Chemistry, Thai Nguyen University of Education.
- 2011: Ph.D in Inorganic Chemistry, Institute of Chemistry - Vietnam Academy of Science and Technology.
- 2020: M.Sc in Political-administrative law, Ho Chi Minh National Academy of Politics and Public Administration.

## III. Scientific Publications

### ❖ Articles in international Journals

1. **Loan T. T. Nguyen**, Lan T. H. Nguyen, Nhuong Chu Manh, Dung Nguyen Quoc, Hai Nguyen Quang, Hang T. T. Nguyen, Duy Chinh Nguyen, Long Giang Bach (2019), A Facile Synthesis, Characterization, and Photocatalytic Activity of Magnesium Ferrite Nanoparticles via the Solution Combustion Method, *Journal of Chemistry*, Vol. 2019, pp.1-8, <https://doi.org/10.1155/2019/3428681>.
2. **Loan T. T. Nguyen** , Lan T. H. Nguyen, Anh T. T. Duong, Bui Duc Nguyen, Nguyen Quang Hai , Viet Ha Chu , Trinh Duy Nguyen and Long Giang Bach (2019), Preparation, Characterization and Photocatalytic Activity of La-Doped Zinc Oxide Nanoparticles, *Materials*, Vol.12, No. 8, pp.1195.
3. **Loan T. T. Nguyen**, Lan T. H. Nguyen, N T T Hang, Nguyen Quang Hai, Vu Thi Hau, Duy Trinh Nguyen, To-Uyen T. Dao (2019), Influence of fuel on the structure, morphology, magnetic properties and photocatalytic activity of  $\text{NiFe}_2\text{O}_4$  nanoparticles, *Asian Journal of Chemistry*, Vol. 31, No.12, pp. 2865-2870.
4. **Nguyen Thi To Loan**, Nguyen Thi Hien Lan, Nguyen Thi Thuy Hang, Nguyen Quang Hai, Duong Thi Tu Anh, Vu Thi Hau, Lam Van Tan and Thuan Van Tran, 2019,  $\text{CoFe}_2\text{O}_4$  Nanomaterials: Effect of Annealing Temperature on Characterization, Magnetic, Photocatalytic, and Photo-Fenton Properties, *Processes*, Vol. 7, No. 885, doi 10.3390.
5. T H T Nguyen, T T U Dao, G V Pham, T S Do, **T T L Nguyen**, T H L Nguyen, M N Chu, D Q Nguyen Quoc, N A Tien (2020), Effect of pH on the adsorption behaviour of Congo Red Dye on the Mg-Al layered double hydroxide, *IOP Conference Series: Materials Science and Engineering* , Vol. 736, pp. 022077.
6. Luu Minh Dai, **Nguyen Thi To Loan**, Dao Ngoc Nhiem, Vu The Ninh (2007), “Exmination of factors affecting on synthesis of nanopowder  $\text{Mn}_2\text{O}_3$  by the gel combustion method at low temperature”, *Proceedings of the first VAST – KOCI workshop on science and technology R&D Cooperation*, Hanoi, Vietnam, September, pp. 33-38.
7. Luu Minh Dai, Nguyen Gia Hung, Vo Quang Mai, **Nguyen Thi To Loan**, Dao Ngoc Nhiem (2007), “Low temperature synthesis of nanostructured rare earth oxides through a polymer route by using polyvinyl alcohol as a polymer matrix”, *Proceedings of the first VAST – KOCI workshop on science and technology R&D Cooperation*, Hanoi, Vietnam, September, pp.215-220.

#### ❖ Articles in national Journals

1. Luu Minh Dai, Nguyen Gia Hung, **Nguyen Thi To Loan**, Dao Ngoc Nhiem (2006), Low temperature synthesis of nanostructured rare earth oxides  $\text{Nd}_2\text{O}_3$

- and  $\text{Eu}_2\text{O}_3$  by using Polyvinyl Alcohol as a Polymetric Matrix, Vietnam Journal of Chemistry, Vol. 44, No.4, pp. 471- 474.
2. Nguyen Trong Uyen, Le Huu Thieng, **Nguyen Thi To Loan** (2006), Study on the single and mixed ligands complexes of L- Histidine and acetylacetone with some rare earth elements (La, Ce, Pr, Nd) by pH titration method, Vietnam Journal of Chemistry, Vol. 44, No. 6, pp. 701- 703.
  3. Luu Minh Dai, **Nguyen Thi To Loan**, Dao Ngoc Nhiem, Vu The Ninh (2008), Synthesis of nanosized  $\text{MnO}_2$  by the gel combustion method and studying the ability to use nanostructured  $\text{MnO}_2$  for adsorbing the arsenic, Vietnam Journal of Chemistry, Vol 46, No.2A, pp. 43-49.
  4. Luu Minh Dai, **Nguyen Thi To Loan**, Dao Ngoc Nhiem, Vu The Ninh (2008), Synthesis of nanosized  $\text{Mn}_2\text{O}_3$  by the gel combustion method on low temperature, Vietnam Journal of Chemistry, Vol.46, No.4, pp. 451-455.
  5. Luu Minh Dai, Dao Ngoc Nhiem, Pham Ngoc Chuc, Vu The Ninh, **Nguyen Thi To Loan**, (2008), Synthesis of nanosized  $\text{NiO}$  by the gel combustion method, Vietnam Journal of Chemistry, Vol.46, No.5, pp.614 – 618.
  6. Luu Minh Dai, **Nguyen Thi To Loan** (2009), Synthesis of nanosized  $\gamma\text{-Fe}_2\text{O}_3$  by the gel combustion method and a study on adsorbing iron, manganese, arsenic, Vietnam Journal of Chemistry, Vol. 47, No.6A, pp. 260-264.
  7. Luu Minh Dai, Dao Ngoc Nhiem, **Nguyen Thi To Loan** (2009), Study on arsenic, manganese, iron adsorption by the nanosize  $\alpha\text{-Fe}_2\text{O}_3$  coated sand, Vietnam Journal of Chemistry, Vol 47, No.6A, pp. 265-268.
  8. Luu Minh Dai, **Nguyen Thi To Loan** (2010), “Synthesis of nanosized  $\alpha\text{-Fe}_2\text{O}_3$  by the gel combustion method, Vietnam Journal of Chemistry, Vol. 48, No.3, pp. 358-363.
  9. Luu Minh Dai, **Nguyen Thi To Loan** (2010), Study on arsenic adsorption by the nanosize  $\gamma\text{-Fe}_2\text{O}_3$ , Journal of Analytical Sciences, Vol.14, No.4, pp. 155-159.
  10. Luu Minh Dai, **Nguyen Thi To Loan** (2010), Synthesis of nanosized  $\gamma\text{-Fe}_2\text{O}_3$  for adsorption of arsenic, iron and manganese, Vietnam Journal of Chemistry, Vol 48, No.4A, pp. 180-184.
  11. Luu Minh Dai, **Nguyen Thi To Loan** (2010), Synthesis of nanosized  $\text{CoFe}_2\text{O}_4$  by the gel combustion method, Vietnam Journal of Chemistry, Vol 48, No.4, pp. 447-451.
  12. Luu Minh Dai, **Nguyen Thi To Loan** (2010), Synthesis of nanosized  $\text{Co}_3\text{O}_4$

- by the gel combustion method, Vietnam Journal of Chemistry, Vol. 48, No. 6, pp. 683-686.
13. Luu Minh Dai, **Nguyen Thi To Loan**, Vo Quang Mai (2011), Synthesis of nanosized  $\beta$ -MnO<sub>2</sub> and  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub> doped sand for arsenic adsorption", Vietnam Journal of Chemistry, Vol.49, No. 3A, pp. 6-10.
  14. Luu Minh Dai, **Nguyen Thi To Loan** (2011), Synthesis of nanosized  $\beta$ -MnO<sub>2</sub> for arsenic, iron and manganese adsorption, TNU Journal of Science and Technology, Vol. 80, No.4, pp. 149-152.
  15. Luu Minh Dai, **Nguyen Thi To Loan** (2011), Synthesis of nanosized  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub> doped sand for arsenic, iron and manganese adsorption, Vietnam Journal of Chemistry, Vol. 49, No. 2, pp. 153-156.
  16. Luu Minh Dai, **Nguyen Thi To Loan** (2011), Study on arsenic adsorption by the nanosize  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub>", Vietnam Journal of Chemistry, Vol. 49, No.3, pp. 282-285.
  17. Luu Minh Dai, **Nguyen Thi To Loan** (2011), Studying the effects of some factors on arsenic adsorption on nano oxides MnO<sub>2</sub>, Vietnam Journal of Chemistry, Vol. 49, No.6, pp. 666-669.
  18. **Nguyen Thi To Loan**, Tran Thi Trang (2012), Studing synthesis CoAl<sub>2</sub>O<sub>4</sub> nanosized by the gel combustion method, Vietnam Journal of Chemistry, Vol 50, No.5A, pp. 186-189.
  19. **Nguyen Thi To Loan**, Pham Thu Huong, Vu Thi Lua (2012), Study synthesize oxides ZnO nanoparticles and photocatalytic degradation of blue methylene, TNU Journal of Science and Technology, Vol 100, No.12, pp. 147-151.
  20. **Nguyen Thi To Loan**, Pham Thu Huong (2013), Studing synthesis ZnMn<sub>2</sub>O<sub>4</sub> nanosized by the gel combustion method, Vietnam Journal of Chemistry, Vol. 51, No. 2AB, pp. 21-24.
  21. **Nguyen Thi To Loan** (2013), Studing synthesis ZnFe<sub>2</sub>O<sub>4</sub> nanosized by the gel combustion method, Vietnam Journal of Chemistry, Vol 51, No.3AB,pp. 123-125 .
  22. **Nguyen Thi To Loan** (2013), Studing synthesis ZnMnO<sub>3</sub> nanosized by the gel combustion method, Vietnam Journal of Chemistry, Vol 51, No.3AB, pp.119-122.
  23. **Nguyen Thi To Loan**, Nguyen Thi Van Anh (2013), Study synthesis Ce-doped ZnO nanosized by the gel combustion method, Vietnam Journal of

- Chemistry, Vol 51, No.6ABC, pp. 734-738.
24. **Nguyen Thi To Loan**, Chu Thi Anh Ngoc (2014), Studing synthesis Al-doped ZnO nanosized by the gel combustion method, Vietnam Journal of Chemistry, Vol 52, No.5A, pp. 224-228.
  25. **Nguyen Thi To Loan**, Nguyen Thi Yen (2014), Adsorption studies of ion  $\text{Fe}^{3+}$  on nanopowders Ni doped ZnO, Vietnam Journal of Chemistry, Vol 52, No.5A 229-232.
  26. **Nguyen Thi To Loan**, Nguyen Quang Hai (2014), Study the catalytic decomposition of phenol red ZnO nanomaterials doped Ce and Mn, Journal of Analytical Sciences, Vol 19, No 4, pp. 39-43.
  27. **Nguyen Thi To Loan**, Nguyen Quang Hai (2015), Studing synthesis  $\text{ZnAl}_2\text{O}_4$  nanosized by the gel combustion method, Journal of Analytical Sciences, Vol 20, No 3, pp. 69-74.
  28. **Nguyen Thi To Loan**, Tran Thi Nu (2016), Synthesis, study the structural characterstics and photocatalytic properties of nanoparticles  $\text{NiAl}_2\text{O}_4$ , Journal of Analytical Sciences, Vol 21, No 1, pp. 33-37.
  29. **Nguyen Thi To Loan**, Nguyen Quang Hai, Le Thi Bich Ngoc (2016), Synthesis, study on the structural characterstics and ion  $\text{Mn}^{2+}$  adsorption on Fe doped ZnO nanoparticles, Journal of Analytical Sciences, Vol 21, No. 2, pp. 36-41.
  30. **Nguyen Thi To Loan**, Nguyen Thi Thanh Hue, Tran Thi Dieu Huyen, Nguyen Thi Thuy Hang (2016), Preparation, characterization of spinel  $\text{MnAl}_2\text{O}_4$  nanoparticles synthesized by combustion method, Vietnam Journal of Chemistry, Vol. 54, No.5E, pp.58-60.
  31. Le Huu Thieng, **Nguyen Thi To Loan**, Nguyen Quang Hai, Nguyen Thi Thuy Hang (2016), Preparation, characterization and photocatalytic activity of oxides  $\text{CoAl}_2\text{O}_4$  nanoparticles, Journal of Analytical Sciences, Vol. 21, No. 3, pp. 123-129.
  32. **Nguyen Thi To Loan**, Nguyen Thi Thuy Hang (2017), Preparation, characterization and photocatalytic activity of oxides  $\text{MnFe}_2\text{O}_4$  nanoparticles, Journal of Analytical Sciences, Vol. 22, No. 2, pp. 88-93.
  33. **Nguyen Thi To Loan**, Nguyen Thi Quyen (2017), Studing synthesis  $\text{CuFe}_2\text{O}_4$  nanosized by the gel combustion method, Journal of Analytical Sciences, Vol. 22, No. 3, pp. 86-90.
  34. Nguyen Thi Thuy Hang, Le Huu Thieng, **Nguyen Thi To Loan** (2017).

- Studying synthesis  $\text{ZnAl}_2\text{O}_4$  nanosized by the solution combustion method, Vietnam Journal of Chemistry, Vol 55 (5E1,2), pp. 110-113.
35. **Nguyen Thi To Loan**, Nguyen Quang Hai, Nguyen Thi Thuy Hang (2018), Synthesis, study the structural characteristics and photocatalytic properties of nanoparticles  $\text{CoFe}_2\text{O}_4$ , Journal of Analytical Sciences, Vol 23(1), pp. 87- 93.
  36. **Nguyen Thi To Loan**, Nguyen Thi Kieu Trang, Nguyen Quang Hai, Nguyen Thi Mai (2018), Synthesis, study on structural characteristics and photocatalytic properties of nanoparticles Cu-doped  $\text{ZnO}$ , Vietnam Journal of Chemistry, Vol 56 (3E12), pp. 42-46.
  37. **Nguyen Thi To Loan**, Nguyen Thi Huyen (2018), Synthesis, study on structural characteristics and photocatalytic properties of nanoparticles Ag-doped  $\text{ZnO}$ , Vietnam Journal of Chemistry, Vol. 56, No. 3E12, pp. 37-41.
  38. Nguyen Thi Thuy Hang, Le Huu Thieng, **Nguyen Thi To Loan** (2018), Studying synthesis of  $\text{ZnFe}_2\text{O}_4$  nanoparticles by the combustion method using urea agent, Journal of Analytical Sciences, Vol.23, No. 3, pp. 83-88.
  39. **Nguyen Thi To Loan**, Nguyen Quang Hai, Nguyen Thi Thuy Hang (2018), Preparation, characterization and photocatalytic activity of Sr-doped zinc oxide nanoparticles, Vietnam Journal of Chemistry, Vol. 56, No. 6E2, pp.114-118.
  40. Nguyen Thi Thuy Hang, **Nguyen Thi To Loan**, Le Huu Thieng, Hoang Thi Cham, Tran Thi Hong Nhung (2018), Preparation, characterization and photocatalytic activity of  $\text{NiFe}_2\text{O}_4$  nanoparticles, Vietnam Journal of Chemistry, Vol. 56, No. 6E2, pp.109-113.
  41. **Nguyen Thi To Loan**, Nguyen Quang Hai, Nghiem Thi Huong, Nguyen Thi Thuy Hang (2019), Preparation  $\text{MgAl}_2\text{O}_4$  nanoparticles using gel combustion method, Journal of Analytical Sciences, Vol. 24, No.2, pp. 133-137.
  42. **Nguyen Thi To Loan**, Nguyen Quang Hai, Nguyễn Thị Bích Nga, Nguyen Thi Thuy Hang (2019), Preparation and study photocatalytic degradation of rhodamine B of Al doped  $\text{ZnO}$  nanoparticles, Vietnam Journal of Chemistry, Vol. 57, No. 2e1,2, pp.159-164.
  43. Nguyen Thi Thuy Hang, **Nguyen Thi To Loan**, Le Huu Thieng, Nguyen Quang Hai (2019), Preparation and study photocatalytic degradation of rhodamine B on spinel  $\text{ZnFe}_2\text{O}_4$  nanoparticles, Vietnam Journal of Chemistry, Vol. 57, No.4e1,2, pp.159-163.
  44. **Nguyen Thi To Loan**, Nguyen Quang Hai, Nguyen Thi Thuy Hang (2019),

- Preparation, characterization and photocatalytic degradation of methylene blue on spinel La-doped  $\text{MgAl}_2\text{O}_4$  nanoparticles, Journal of Analytical Sciences, Vol. 24, No. 4, pp. 133-138.
45. Nguyen Thi Hien Lan, **Nguyen Thi To Loan**, Duong Thi Tu Anh (2019), Preparation, investigation into mass spectra and luminescence of acetylsalicylate complexes of some light rare earth elements, Journal of Analytical Sciences, Vol. 24, No. 4, pp. 154-159.
  46. **Nguyen Thi To Loan**, Nguyen Thi Thuy Hang, Pham Thi Lan Huong (2019), Preparation, characterization and photocatalytic activity for degradation of rhodamine B of Fe-doped zinc oxide nanoparticles, Journal of Military Science and Technology, Vol. 10-2019, pp. 335-342.
  47. **Nguyen Thi To Loan**, Nguyen Thi Yen, Nguyen Quang Hai, Nguyen Thi Thuy Hang (2020), Preparation, characterization and photocatalytic activity for degradation of methylene blue of spinel  $\text{Zn}_x\text{Ni}_{1-x}\text{Fe}_2\text{O}_4$  ( $x=0-0,5$ ) nanoparticles, Journal of Analytical Sciences, Vol. 25, No.1, pp.7-12.
  48. **Nguyen T To Loan**, Dao Thi Thu Hoai, Nguyen Quang Hai, Nguyen Thi Thuy Hang (2020), Preparation, characterization, property and photocatalytic activity for degradation of methylene blue of La-doped  $\text{CoFe}_2\text{O}_4$  nanoparticles, Journal of Analytical Sciences, Vol. 25, No.2, pp. 7-13.

#### IV. Research Grants/ Projects

##### ❖ Ministry level

1. Project name: *"Synthesis oxits of coban and niken nanosized by the gel combustion method and application"*, Funding institution: MOET, B2008-TN04-08. Accepted in 2010 - excellent grade.

##### ❖ University level

2. Project name: *"Research synthesis of zinc oxide nano materials and their application orientation to handle some heavy metals and organic compounds in the aquatic environment "*, Funding institution: Thai Nguyen University, ĐH2013-TN04-06. Accepted in 2015 – good grade.

#### V. Published Books

1. Inorganic Chemistry II (2014), Education Publishing House, Viet Nam.
2. Chemistry of non-metallic elements (2018), Thai Nguyen University Publishing House, Viet Nam.

**VI. Supervisor (Master)**

| <b>No</b> | <b>Name</b>           | <b>Degree</b> | <b>Training organization</b> | <b>Guidance year</b> | <b>Graduation year</b> |
|-----------|-----------------------|---------------|------------------------------|----------------------|------------------------|
| 1         | Pham Thu Huong        | Master        | Thai Nguyen University       | 2012                 | 2013                   |
| 2         | Nguyen Thi Van Anh    | Master        | Thai Nguyen University       | 2013                 | 2014                   |
| 3         | Nguyen Manh Ha        | Master        | Thai Nguyen University       | 2013                 | 2014                   |
| 4         | Chu Thi Anh Ngoc      | Master        | Thai Nguyen University       | 2014                 | 2015                   |
| 5         | Nguyen Thi Yen        | Master        | Thai Nguyen University       | 2014                 | 2015                   |
| 6         | Tran Thi Nu           | Master        | Thai Nguyen University       | 2015                 | 2016                   |
| 7         | Nguyen Thi Thanh Hue  | Master        | Thai Nguyen University       | 2015                 | 2016                   |
| 8         | Nguyen Thi Quyen      | Master        | Thai Nguyen University       | 2016                 | 2017                   |
| 9         | Nguyen Hoang Phuong   | Master        | Thai Nguyen University       | 2016                 | 2017                   |
| 10        | Nguyen Thi Huyen      | Master        | Thai Nguyen University       | 2017                 | 2018                   |
| 11        | Nguyen Thi Kieu Trang | Master        | Thai Nguyen University       | 2017                 | 2018                   |
| 12        | Hoang Thi Cham        | Master        | Thai Nguyen University       | 2018                 | 2019                   |
| 13        | Nguyen Tra My         | Master        | Thai Nguyen University       | 2018                 | 2019                   |
| 14        | Le Thi Hue            | Master        | Thai Nguyen University       | 2018                 | 2019                   |
| 15        | Dao Thi Thu Hoai      | Master        | Thai Nguyen University       | 2018                 | 2020                   |
| 16        | Nguyen Thi Yen        | Master        | Thai Nguyen University       | 2019                 | 2020                   |

**VII. Honors and Awards**

+ 1 time awarded the ministerial-level emulation soldier: 2019 (Decision No. 4343/QĐ-BGDĐT, November 13, 2019 of the Minister of Education and Training).

+ 02 merit certificates from the Minister of Education and Training, 2013 and 2016, 2018 (Decision No. 752/QĐ-BGDĐT, February 22, 2013, and Decision No. 5245/QĐ-BGDĐT November 8, 2016 of the Minister of Education and Training).

*Thai Nguyen, 15 September 2020*

**Nguyen Thi To Loan**