**Activités de recherche (2020-2024) / Équipe N° 5 Pr. Salhi**

**Chimie de coordination et applications**

1. **Publications**

Quantification of phenolic acids by partial least squares Fourier‐transform infrared (PLS‐FTIR) in extracts of medicinal plants. **N. Bensemmane**, N. Bouzidi, Y. Daghbouche, Salvador Garrigues, Miguel de la Guardia, M. El Hattab. Phytochemical Analysis-Wiley, **2021**, 32(2):206–21. <http://dx.doi.org/10.1002/pca.2974>

Efficient Hydrogen Production by steam reforming over Ni catalysts. Addition effect of La and Fe on Al2O3. M. Boudjeloud, O. Kheffache. A. Boulahouache, **N. Salhi**. Proceeding of the 2nd international symposium on materials chemistry. ISMY 2021, 16-20 May 2021. Virtual Scientific Meeting. ISBN 978-9931-9091-1-7

Photocatalytic hydrogen production over MFe2O4 (M=Ni,Co) spinel powders. M. Benlembarek, M. Trari, A.Boulahouache, R.Benrabaa, **N.Salhi**. Proceeding of the 2nd International Smposium on Materials Chemistry. ISMY 2021 Virtual Scientific Meeting, 16-20 **May 2021**. Virtual Scientific Meeting. ISBN 978-9931-9091-1-7.

M.Benlembarek, A. Boulahouache, M. Trari, R. Benrabaa, **N. Salhi**.Synthesis and characterization of NiFe2O4 for photocatalytic hydrogen production. Proceedings of the 9th Global Conference on Global Warming (GCGW-**2021**) August 1-4, 2021 Virtual conference, Croatia.[https://doi.org/10.1016/j.ijhydene.2022.10.090 0360-3199](https://doi.org/10.1016/j.ijhydene.2022.10.090%200360-3199)

M.Benlembarek, N. Salhi, R. Benrabaa, A.M. Djaballah, A. Boulahouache, M. Trari. Synthesis, physical and electrochemical properties of the spinel CoFe2O4: Application to the photocatalytic hydrogen production International Journal of Hydrogen Energy/ 2022, 47(2022)9239-9247.<https://doi.org/10.1016/j.ijhydene.2021.12.270>

Efficient preparation of 10%wt(Ni-M)/α-Al2O3(M=La,Fe) catalysts active in steam reforming of methane for hydrogen production. M.Boudjeloud, A.Boulahouache, R.Benrabaa**, N.Salhi**. Proceedings of the 9th Global Conference on Global Warming (GCGW-2021) **August** 1-4, **2021** Virtual conference, Croatia.

Catalytic Reforming of Methane Over Ni–La2O3 and Ni–CeO2CatalystsPrepared by Sol-Gel Method. **Yahi N**, Kouachi K, Akram H, Rodríguez-Ramos I. Advances in RenewableHydrogen and OtherSustainable Energy Carriers. **2021** ;47–54. <http://dx.doi.org/10.1007/978-981-15-6595-3_7>

Prediction of Total PhenolicAcidsContained in Plant Extracts by PLS-ATR-FTIR. **BensemmaneNachida**, Naima Bouzidi, Yasmina Daghbouche, Salvador Garrigues, Miguel de la Guardia, Mohamed El Hattab. South African Journal of Botany 151, **2022**, 295–305. <https://doi.org/10.1016/j.sajb.2022.10.009>

Physical and electrochemical features of MgFe2O4 for hydrogen production. Maroua Benlembarek, **Nassima Salhi**, Rafik Benrabaa, Ali Boulahouache, Salah Eddine Berrabah and Mohammed Trari.Proceedings of the 2nd World Energy Storage Conference: WESC-**2022**, 18-21 December, Istanbul. ISBN: 978-605-9546-19-5

M. Benlembarek,N. Salhi, R. Benrabaa , A.M. Djaballah, A. Boulahouache, M. Trari. Enhanced photocatalytic performance of NiFe2O4 nanoparticle spinel for hydrogen production. International Journal of Hydrogen Energy. Volume 48, Issue 24, 19 March 2023, Pages 8932-8942. [https://doi.org/10.1016/j.ijhydene.2022.10.090 0360-3199](https://doi.org/10.1016/j.ijhydene.2022.10.090%200360-3199)

Preparation, characterization and electronic properties of LaFeO3 perovskite as photocatalyst for hydrogen production. A. Boulahouache M. Benlembarek, N. Salhi, A.M. Djaballah, Cherifa Rabia, M. Trari. International Journal of Hydrogen Energy [Volume 48, Issue 39](https://www.sciencedirect.com/journal/international-journal-of-hydrogen-energy/vol/48/issue/39), 5 May 2023, Pages 14650-14658 <https://doi.org/10.1016/j.ijhydene.2022.12.327>

Synthesis and characterization of LaAl0.9Fe0.1O3 perovskite: Application to oxygen photo-production. Hamza MEDJADJI, Ali BOULAHOUACHE, Khaled DERKAOUI, Mohamed TRARI,**Nassima SALHI**. Proceedings of the 2nd International Conference on Computational & Applied Physics ICCAP -2023, Blida 08-10 October **2023**. ISSN:0067-3064.

Synthesis and physical, optical and electrochemical properties of LaMnO3 semiconductor perovskite oxide. A.Boulahouache, **N.SALHI**, H.Medjadji, M.Benlembarek, Khaled Derkaoui, Cherifa Rabia, M.Trari. Proceedings of 2nd International Conference on Computational & Applied Physics ICCAP -**2023**, Blida 08-10 October 2023. ISSN:0067-3064.

Mounia Belacel, Amar Hadef, Abdelbaki Mameri, Insaf Tou, Abdelhak Skender &**Nassima Salhi**. Environmental Effects Statistical approach and numerical analysis of turbulent diffusion flame of CH4/H2 mixture. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 46(1), December 4, 2023, 636–58. <https://doi.org/10.1080/15567036.2023.2287675>

Statistical approach and numerical analysis of turbulent diffusion flame of CH4/H2 mixture, Mounia Belacel, Amar Hadef, Abdelbaki Mameri, Insaf Tou, Abdelhak Skender, **Nassima Salhi**. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects 46, 1(**2024**) 636-658.

In Silico Approach for Developing New Anti-Tuberculosis Drug Candidates: 3DQSAR, Molecular Docking and ADME Studies of Pretomanid Derivatives. **Abderahmane Belafriekh\***, Aicha Laoud, L.arbi El mchichi and Mohamed Bouachrine; Physical Chemistry research, September **2024**, 12 (3), 729-743. doi:10.22036/pcr.2024.425052.2448.

Novel CoFe2O4/LaAlO3 nanocomposites: An impressive photocatalyst with p-n hetero-junction for improved H2 generation under visible exposure. H. Medjadji, A. Boulahouache, K. Derkaoui, **N. Salhi**. International Journal of Hydrogen energy, October**2024**, 88:878-888.<https://doi.org/10.1016/j.ijhydene.2024.09.233>

Synthesis and characterization of LaAl0.9Fe0.1O3 perovskite: Application to oxygen photo-production. H.MEDJADJI, A.BOULAHOUACHE, K. Derkaoui, M.TRARI, **N.SALHI**, Baltica Journal, December **2024**; 190-204.<https://www.researchgate.net/publication/387223009_Synthesis_and_characterization_of_LaAl09Fe01O3_perovskite_Application_to_oxygen_photo-production>

Synthesis by Sol-Gel Route and Characterization of the Perovskite LaAlO3. Medjadji H, Benlembarek M, **Salhi N**, Boulahouache A, Berrabah SE, Trari M. SSRN, December **2024**.<http://dx.doi.org/10.2139/ssrn.5052259>

Photocatalytic degradation of safranin O dye under visible light using NiO-MgO catalysts Cellulose Chemistry and Technology. **Nora Yahi**, Lamine Aoudjit, Ikkour Kahina, Islam Baalache and Djamila Sellam.Cellulose Chem. Technol., 58 (1-2), 133-139 (**2024**).<http://dx.doi.org/10.35812/CelluloseChemTechnol.2024.58.13>

Synthesis and Characterization of 15% Ni/MgO-CeO2 and Its Application in Photocatalytic Degradation of Dyes, **Yahi Nora**. PROCEDING 2nd International Conference on Computational & Applied Physics ISSN:0067-3064.

**Communications**

**a. Internationales**

3rd International Conference on Physical Chemistry & Functional Materials PCFM, **22-24 September, 2020, Malatya, Turkey.** A DFT/MPWB1K study of the mechanism and selectivity of the intramolecular 1,3-dipolar cycloaddition reaction of the nitrone–alkene. **Abderahmane Belafriekh**, Fouad Chafaa.

Photocatalytic hydrogen production over MFe2O4 (M=Ni, Co) spinel powders.Maroua Benlembarek, Mohamed Trari, Ali Boulahouache, Rafik Benrabaa, **Nassima Salhi**. 2nd International Symposium on Materials Chemistry, ISyMC’2021, Boumerdes16-20 **Mai/ 2021**<https://isymc2020.wixsite.com/umbb><https://isymc.sciencesconf.org/>

Efficient Hydrogen Production by steam reforming over Ni catalysts. Addition effect of La and Fe on Al2O3. M. Boudjeloud, O. Kheffache. A. Boulahouache, **N. Salhi**. 2nd international symposium on materials chemistry. ISMY2021, Virtual Scientific Meeting, Boumerdes**16-20 May 2021**.<https://isymc.sciencesconf.org/>

Synthesis and characterization of NiFe2O4 for photocatalytic hydrogen production**.** M.Benlembarek, A. Boulahouache, M. Trari, R. Benrabaa, **N. Salhi.** 9th Global Conference on Global Warming GCGW 1-4 Août**2021** Virtual conference**.** <http://www.gcgw.org/gcgw2021/>

Partial substitution of nickel by lanthanum or iron over Ni/α-Al2O3 catalyst for hydrogen production at low temperature in methane steam reforming. M.Boudjeloud, A.Boulahouache, R.Benrabaa, **N.Salhi**. 9th Global Conference on Global Warming GCGW 1-4 Août**2021** Virtual conference.<http://www.gcgw.org/gcgw2021/>

Preparation and Characterizations of MgFe2O4 Spinel semiconductor. M. Benlembarek, A. Boulahouache, M.Trari, R. Benrabaa, **N. Salhi**. 1st International Conference on Computational & Applied Physics- ICCAP, Blida 26-28 **Septembre 2021**.<https://www.univ-blida.dz/iccap2021/> DOI: 10.21467/abstracts.122

Synthesis and characterization of Ni-MgO nanoparticles. **Nora Yahi**, Hanane Akram, KahnaIkkour, Djamila Sellam. 1st international webinar on biological and chemical Engineering. **Novembre** 10-11th, **2021.**DOI: 10.13140/RG.2.2.10690.66242

Dégradation photocatalytique des produits organiques en présence de photo catalyseurs de type pérovskiteLaZn1-xNixO3. DEKKAR Fazia, SELLAM Djamila, **YAHI Nora**, BELAID Taous, SOUALAH Ahcene, BEDHOUCHE Fatiha. 1st international webinar on biological and chemical Engineering. **Novembre** 10-11th, **2021.**DO:10.13140/RG.2.2.10690.66242

Visible light induced hydrogen evolution on Co-Fe spinel powder. M. Benlembarek, **N. Salhi**, R. Benrabaa, A. Boulahouache, M. Trari**.** The 3rd International Conference on Advanced Engineering in Petrochemical Industry (ICAEPI’21)November 30th - **December 2nd, 2021**.http://ftech.univ-skikda.dz/ICAEPI2021.

Synthesis and characterization of the spinel CoFe2O4 and its application as photocatalyst for H2 evolution under visible light irradiation. Maroua Benlembarek, Mohamed Trari, Ali Boulahouache, Rafik Benrabaa, **Nassima Salhi**. The first International Seminar on Materials Synthesis and Environmental Monitoring, ISMSEM, Ouargla **7-9Février 2022.**<https://ismsem2022.sciencesconf.org/>.

Nanostructured Spinel-ferrite MFe2O4 (M = Co, Ni, Mg) Photocatalysts: Application in Hydrogen Production. M. Benlembarek, R. Benrabaa, **N. Salhi,** A. Boulahouache, M. Trari.1ère Conférence Internationale sur la Technologie de la Catalyse dans l’Industrie Pétrolière et Gazière - 1ère CITCIPG. Oran 29-30 **mars 2022**

Physical properties of a ternary LaNiO3 perovskite oxide as photocatalyst for hydrogen production. A.Boulahouache, **N.SALHI**, M. Benlembarek, M. Trari., C.Rabia.1ère Conférence Internationale sur la Technologie de la Catalyse dans l’Industrie Pétrolière et Gazière - 1ère CITCIPG. Oran 29-30 **mars 2022**

8thEuChemS Chemistry Congress, **28th August to 1st September 2022, Lisbon, Portugal.** Enzymatic synthesis of fructose fatty acid esters using oleic acid as acyl donor and lipase cross-linked enzyme aggregates as biocatalyst. **Abderahmane Belafriekh.**

Physical and electrochemical features of MgFe2O4 for hydrogen production**.** Maroua Benlembarek, **Nassima Salhi**, Rafik Benrabaa, Ali Boulahouache, Salah Eddine Berrabah and Mohammed Trari**.** The 2nd World Energy Storage Conference: WESC-**2022**, 18-21 **December**, Istanbul**[. https://wesc2022conference.com](C:\\Users\\USER\\Desktop\\Nassima\\. https:\\wesc2022conference.com)**

1st international on chemical process & environment, **14- 15 March 2023, Biskra, Algeria.** QSAR Modeling of some oxindol derivatives as anti-diabetic agents. **AbderahmaneBelafriekh,** Aicha Laoud.

32ème Congrès international de l’ATBS, **18-20 Mars 2023, Sousse, Tunisia.**Ultrasound-promoted lipase crosslinked enzyme aggregates catalysed esterification of glucose and fatty acids. **AbderahmaneBelafriekh**, Fatiha Benamia.

3ème Journées Internationales de Chimie Hétérocyclique et ses Applications**, 6 & 7 Juillet 2023, La Marsa, Tunisie.** 3D-QSAR Atom-Based, Virtual Screening, and Molecular Docking for Identification of Dnd Inhibitors with Potential Anti-tuberculosis Activity. **Abderahmane Belafriekh.**

Synthesis and characterization of LaAl0.9Fe0.1O3 perovskite: Application to oxygen photo-production. Hamza MEDJADJI, Ali BOULAHOUACHE, Khaled DERKAOUI, Mohamed TRARI, **Nassima SALHI**. 2nd International Conference on Computational & Applied Physics ICCAP -2023, Blida **08-10October 2023**. <https://www.univ-blida.dz/iccap-Blida1>

Synthesis and physical, optical and electrochemical properties of LaMnO3 semiconductor perovskite oxide.A.Boulahouache, **N.SALHI**, H.Medjadji, M.Benlembarek, Khaled Derkaoui, Cherifa Rabia, M.Trari. 2nd International Conference on Computational & Applied Physics ICCAP -2023, Blida **08-10October 2023.<https://www.univ-blida.dz/iccap-Blida1>**

Synthesis and Characterization of 15% Ni/MgO-CeO2 and Its Application in Photocatalytic Degradation of Dyes.**Yahi Nora**. 2nd International Conference on Computational & Applied Physics. **8-10 October 2023**. https://www.univ-blida.dz/en/evenement/the-2nd-international-confirence-on-computational-applied-physics/

Degradation of Methyl Orange by LaAl0.9 Fe0.1O3 nano-perovskite.Hamza MEDJADJI, Ali BOULAHOUACHE, **Nassima SALHI**. International Conference on Environment Technologies and Sustainable Energy,Sidi Fredj **17-18 October 2023. https://icetse.crapc.dz/**

CoFe2O4/LaAlO3 heterojunction for efficient photocatalytic hydrogen evolution.Hamza MEDJADJI, **Nassima SALHI**, Maroua BENLEMBAREK,Ali BOULAHOUACHE, Mohamed TRARI.The 2nd Edition International Conference on Oil, Gas, and Petroleum Engineering, Boston, USA **26-28 October 2023.** <https://kindcongress.com/event/2nd-edition-of-international-conference-on-oil-gas-and-petroleum-engineering-iogp-2023/>

Elaboration de catalyseurs type perovskite SrFeO3 et leur application pour l’élimination du BM. D.Aitouche, K.Ikkour, D.Sellam, **N.Yahi** and O.Adjou. International workshop on chemical engineering (IWCE’23). **9-10, December, 2023**. <https://ocs.univ-setif.dz/IWCE2023/IWCE2023>

Synthèse et caractérisations des catalyseurs LaNi1-XZnxO3et amélioration de leurspropriétésphotocatalytiqes dans le visible. O.Adjou, K.Ikkour, D.Sellam, F.Bedhouche,D.Aitouche and **N.Yahi**. International workshop on chemical engineering (IWCE’23). **9-10, December, 2023**. <https://ocs.univ-setif.dz/IWCE2023/IWCE2023>

The removal of Malachite Green through the adsorption method employing 15%Ni/MgO nanoparticles.**N. Yahi**, L.Aoudjit, K.Ikkour. 2nd International Conference on Sustainable Water Treatment Technologies and Environment. **27-28th, December, 2023.** <https://easychair.org/conferences/?conf=sustwater23>

Development of modified perovskite catalysts SrZnO3 and their application for the removal of methylene blue. OuizaAdjou, K.Ikkour, D.Sellam, **N.Yahi** and D.Aitouche. 2nd International Conference on Sustainable Water Treatment Technologies and Environment. **27-28th, December, 2023.**<https://easychair.org/conferences/?conf=sustwater23>

Study of doped Ca0.9Mg0.1Fe2O4 nano-spinel for hydrogen production via photocatalytic water splitting under visible light irradiation.Hamza MEDJADJI, Ali BOULAHOUACHE, Mohamed TRARI, **Nachida BENSEMMANE**, **Nassima SALHI**.The 3rd edition of the international conference on Energy, materials and Environment ICEME2024, Université de Khemis Meliana **06-07 Mai 2024.**<http://www.univ-dbkm.dz/?p=8862&lang=en>

Fifth International Symposium on Medicinal Plants & Materials - MPM, **09-12 May 2024, Monastir, Tunisia.** Valorizing the olive oil quality of the eastern Algerian region via biocatalysis. **Abderahmane Belafriekh**, Aicha Laoud.

Synthesis and characterizations of CaFe2O4 spinel as photocatalyst for hydrogen production Hamza MEDJADJI, Ali BOULAHOUACHE, **Nassima SALHI**, Mohamed TRARI. 2nd International Congress On Energy and Industrial Processes Engineering ICEIPE’24, Alger **14-16 Mai 2024.** [**www.iceipe-usthb-dz.com**](http://www.iceipe-usthb-dz.com)

Analytical study of structure of laminar diffusion flame in hydrogen-enriched methane-air mixture.M.Belacel, A.Hadaf, **N.Salhi**. The second International Congress on energy and Industrial process engineering , Alger **14-16Mai 2024,** [**www.iceipe-usthb-dz.com**](http://www.iceipe-usthb-dz.com)

The 3rd edition of the international conference on materials science and engineering and their impact on the environment ICMSE’2024, **May 29-30th2024**, Sidi Bel Abbès-Algeria. Photocatalytic hydrogen production over MFe2O4 (M=Ca, Cu) nano-spinel powders under visible light irradiation. Hamza MEDJADJI, Ali BOULAHOUACHE, Khaled DERKAOUI, S.E. BERRBAH, Mohamed TRARI, **Nachida BENSEMMANE, Nassima SALHI.**[**https://univ-sba.dz/lpcma/icmse2024/index.html**](https://univ-sba.dz/lpcma/icmse2024/index.html)

2ème Conférence Internationale sur les Sciences Appliquées et l'Innovation (CISAI-**2024**), **8-10 juillet**. Removal of methylene violet under visible light using 15%NiO/MgO semiconductor. **Yahi Nora**, Ikkour Kahina,Sellam Djamila, Lamine Aoudjit, Islam Baalache. <http://www.conf-event.com/CISAI.html>

The 1st International Seminar on medicinalchemistry and green chemistry (1st IS MCGC -Annaba 2024), **13-14 november2024**, Annaba. Synthesis and EnhancedPhotocatalytic Performance of CoAl₂O₄ Nano-sheets: Structural Characterization and Degradation of OrganicPollutantunder Visible Light. **Nachida BENSEMMANE**, Hamza MEDJADJI,Ali BOULAHOUACHE,**Nassima SALHI.**

The first International Conference on Chemistry Science, Materials Design and their applications. ICCSM’**2024November 18-20**, Chlef. Synthesis and EnhancedPhotocatalytic Performance of LaCo1-xAlxO3 (x=0,2) Semiconductor: Structural Characterization and Degradation of OrganicPollutantunder Visible Light. **Nachida BENSEMMANE**, Hamza MEDJADJI, Ali BOULAHOUACHE, **Nassima SALHI.**

International symposium “catalytic Chemistry of C1 molecule. **10-12 July 2024, Lille, France**.Role of mirror cation over hexaaluminates ANiAl11O19-d catalysts in carbon dioxide reforming of methane.K.Ikkour, D.Sellam, **N.Yahi.**

1st International Symposium of AfricanSustainable Energy Solutions.Study of p-n CaFe2O4/LaAlO3heterojunctions for hydrogen production by photocatalytic water splitting process under visible light. Hamza MEDJADJI, Ali BOULAHOUACHE, **Nachida BENSEMMANE**, Mohamed TRARI, **Nassima SALHI**. South Africa, **25-28 Aug 2024**.

**b. Nationales**

4ème Congrès International de la SAN (Société Algérienne de Nutrition) en mode Hybride Virtuelet Présentiel, **October 2021**, Extraction and analysis of phenolic acids from black pepper (piper nigrum) and red pepper (Capcicum annuum) by PLS-FTIR. **BENSEMMANE N.**, BOUZIDI N., DAGHBOUCHE N., EL HATTAB M.

Maroua BENLEMBAREk, **Nassima SALHI**, Rafik BENRABA, Ali BOULAHOUACHE, Mohamed TRARI. Facile synthesis of spinel oxide nano-catalysts for photocatalytic H2evolution. 1er Séminaire National des Sciences du Génie des Procédés : Applications et Innovations "SSGP'22” Alger le **14-15 Décembre 2022.**[www.fgmgp.usthb.dz/ssgp22/](http://www.fgmgp.usthb.dz/ssgp22/)

1st National Seminar of Physics, Chemistry, and Their Applications, **March 6-7 2023**, **Bordj Bou Arreridj, Algeria,** Lipase-mediated enzymatic synthesis of sugar esters in unconventional media system. **Abderahmane Belafriekh**, Fatiha Benamia.

Hamza MEDJADJI, Maroua BENLEMBAREK, Ali BOULAHOUACHE, Mohamed TRARI, Nassima SALHI. Synthesis and characterization of LaAlO3nanopowde by sol-gel method. Scientific and Education day of the Faculty of chemistry, USTHB 18 Avril 2023. <https://jspfch2023.wixsite.com/jspfch23>

Reformage du CH4 par le CO2 sur des catalyseurs type pérovskitesupportés par unsupport naturel.M. Adjissa, D.Sellam, K.Ikkour, **Nora Yahi**, S. Dekkar**. 21 et 22 Juin 2023**. JournéesNationales des Sciences de la Matière (JNSM'2023). <https://webtv.univ-bejaia.dz/index.php/2023/06/ouverture-des-journees-nationales-des-sciences-de-la-matiere-jnsm2023/>

M.Benlembarek, **N.Salhi**, Berrabah Salah Eddine, M.Trari. Structural, magnetic,optical and electrochemical, properties of ZnFe2O4and its photocatalytic application for hydrogen production. The First National Seminair on Chemistry ‘‘FNSC-I’’ Chlef**03-04 October 2023**. <https://www.univ-chlef.dz/FNSCI>

Hamza MEDJADJI, Ali BOULAHOUACHE, **Nassima SALHI**. Synthesis and characterization of LaAl0.9Fe0.1O3 via sol-gel method. The First National Seminar on Chemistry FNSC’2023, Chlef 03-04 October 2023. <https://www.univ-chlef.dz/FNSC1>

Hamza MEDJADJI, Ali BOULAHOUACHE, **Nassima SALHI**. Effect of doping on the physical and optical properties of LaAlO3 nanoparticles. The Second National Seminar on Chemistry and its Applications (SNCA-2-2023) Batna29-30thNovember 2023. <https://labo.univ-batna.dz/lcmvar/>

M.BENLEMBAREK, Salah Eddine BERRABAH,**Nassima SALHI**, Mohamed TRARI. Spinel copper ferrite nanoparticles: Preparation, characterization and photocatalytic activity.The first national conference on matter sciences NCSM2023 (presential and online) Djelfa-20 december 2023 Algeria.<http://conference.univ-djelfa.dz/ncsm2023/program/>

M.Benlembarek, **N. Salhi**. Synthesis And Characterization Of Tetragonal Copper Ferrite Nanoparticles For Photocatalytic H2 Evolution. 2nd National conference on materials, energy & environment. February 13-14, 2024; Biskra, Algeria.

The Inaugural National Congress In Physical and Chemistry Science, **May 07th, 2024, Constantine, Algeria,** 3D-QSAR et docking moléculaire des dérives du salacinol commeinhibiteurspuissants de nt-MGAM. **Abderahmane Belafriekh**, Aicha Laoud.

National seminar on biology, medicinal plants and health, **May 08th, 2024, Batna, Algeria,** 3D-QSAR study on antioxidant activity of caffeic acid derivatives. **Abderahmane Belafriekh**, Fouad Chafaa, LazharBoughani.

National Seminar on Nanomaterials: synthesis and applications, **June 5-6th2024**, Université de Boumerdess, Algérie, Synthesis and characterization of calcium ferrite CaFe2O4 by nitrate route. Hamza MEDJADJI, Maroua BENLEMBAREK, Ali BOULAHOUACHE, Nassima SALHI, **Nachida BENSEMMANE**, Mohamed TRARI.<https://www.univ-boumerdes.dz/NSN2024/>

The 2nd National Seminar on health and environment (SENASE **2024**). The effet of the concentration and pH on the elimination of BM using SrFeO3 catalysts.Attouche Dounia, Ikkour Kahina, Sellam Djamila, **Yahi Nora**, BEDHOUCHE fatiha, AdjouOuiza.

The 2nd National Seminar on health and environment (SENASE **2024**). 2- Amélioration des propriétésphotocatalytiques des oxydesmixtes de lanthane, Nickel et zinc sous lumière visible :Une solution pour la dépollution de l’environnement.AdjouOuiza, Ikkour Kahina, Sellam Djamila, BEDHOUCHE fatiha, Attouche Dounia, **Yahi Nora**.

1. **Chapter Book**

I. Sebai, R. Baghtache, A. Boulahouache, **N. Salhi**, M. Trari.Book Chapter in Advances in Renewable Hydrogen and Other Sustainable Energy Carriers, Springer, Abdallah Khellaf, Editor, 2020, pages: 331-337.

1. **Projets PRFU**

Année d’agrément 2019. Préparation et étude de propriétés de matériaux en vue d’applications au domaine énergétique durable. Chef de projet : SALHI Nassima. Nombre de chercheurs/doctorants impliqués : 06. Observation : Bilan positif.

1. **Encadrements**
2. **Doctorats soutenus**

Boudjeloud Meriem. Spécialité : Chimie organique. D. Sciences. Directeur de Thèse : SALHI Nassima. 2021.

Benlembarek Maroua. Spécialité : Chimie analytique. D-LMD. Directeur de Thèse : SALHI Nassima. 2023.

1. **Masters soutenus**

Préparation et caractérisation de matériaux oxydes type pérovskites à base de nickel d'alcalino-terreux, soutenu par Said Selma et Boukhtachi Faiza, soutenu le 19.10.2020, Départementde chimie,U. Blida1.**BOULAHOUACHE. A et SALHI. N**

BouabdallahCharrazed-GuerrabenRachda, soutenu le19/10/2020, Université Blida 1. « Synthèse et caractérisations d’oxydes à structure définie type pérovskites ».**Encadré par SALHI. N et BOULAHOUACHE.A**

Synthèse et caractérisations d'oxydes à structures définie type pérovskites, soutenu par Melles par BouabdellahChahrazed et GuerrabeneRachda, soutenu le 15/10/2020, Départementde chimie,U.Blida1.**Pr. Salhi**

Effet des ultrasons et du solvant sur la résolution enzymatique du (*R,S*)-1-phenyléthanol, soutenu par Touil Mohamed et Maizi Hakim, soutenu le xx-xx-2020, Département de chimie, U. Blida1. **Dr. Belafriekh**

Préparation et caractérisations de photocatalyseur pour la production d'hydrogène à partir de l'eau, soutenu le 14.09.2021 par Berdja Sonia et Zemmourit Manel, Départementde chimie,U. Blida1. **SALHI. N et A. BOULAHOUACHE**

Etude de l’effet du solvant sur le comportement des lipases CRL et LPP dans des réactions de transesterification, soutenu par Guelai Wissam et Kahia Meriem, le xx-xx-2021. Département de chimie, U. Blida1. **Dr. Belafriekh**

First principlesstudy on a multiferroicmaterial: Bismuth Ferrite BiFeO3, soutenu le 22.9.2021 par HamaidiCherine, Département de chimie, U. Blida1. **SALHI. N et A. BOULAHOUACHE**

Synthèse et caractérisation d'un d'oxyde mixte à base de lanthane et de manganèse, soutenu le 03.07.2022 par Belabed Ahlem et Bouhaya Nesrine, Département de chimie, U. Blida1.**BOULAHOUACHE. A et SALHI. N**

Preparation and characterization of a mixed oxide based on iron, soutenu le 13.07.2022 par Aya Hammoudi, Département de chimie, U. Blida1.**SALHI. N et A. BOULAHOUACHE**

Etude de l’effet d’immobilisation sur l’activité enzymatique de la lipase de Candida rugosa (CRL), soutenu par Zahra Sabrina et Aissou Meriem, le xx-xx-2022. Département de chimie, U. Blida1. **Dr. Belafriekh**

Synthèse enzymatique des esters de sucre : optimisation des conditions opératoires, soutenu par AmiriKhadidja, le xx-xx-2023. Département de chimie, U. Blida1. **Dr. Belafriekh**

Epuration des eaux à l’aide d’un photocatalyseur naturel et d’un photocatalyseur synthétique exposés aux rayons solaires, **Projet Startup**, soutenu par BAIT SIDALI ISLAM, IKRELEF ALI ISHAK, ROUAINIA AISSA, le xx-xx-2023. Département de chimie, U. Blida1. **Dr Yahi**

Photodégradation du Bleu de Méthylène par Photocatalyse en présence de NiO-MgO et NiO-MgO Encapsulé, soutenu par ASSOUMANE ILLO Abdourahamane, le 27/06/2024.**Dr Yahi**

Extraction des molécules bioactives à partir des plantes médicinales algériennes pour leurs utilisations dans la formulation des produits aux propriétés apaisantes, **Projet Startup**, soutenu par TERZOUT YETTOU Sarah et ADEL Riham, le 30/06/2024.**Dr Yahi**

Synthèse et caractérisation d’une pérovskite partiellement substituée: application photocatalytique, soutenu le 03.07.2024 par Issad Yacine et Chaabane Mohamed, Département de chimie, U.Blida1**. Pr. Salhi/Dr. Bensemmane**

Préparation et caractérisation d’un spinelle: Application photocatalytique, soutenu le 01 juillet 2024 par Imelhaine Adel, Département de chimie, U.Blida1. Dr. **Bensemmane/Pr. Salhi**

Valorisation de l’huile d’olive de la région Nord algérienne par voie lipasique, soutenu par Kourichi Fella et Aicha Chahinez, le xx-xx-2024. Département de chimie, U. Blida1. **Dr. Belafriekh**

Elaboration et développement de capsule synthétique pour lave-vaisselle : une approche innovante et écologique, soutenu par Ahmed Messaoud Manar et Hassani Amina, le xx-xx-2024. Département de chimie, U. Blida1. **Dr. Belafriekh**

Extraction des molécules bioactives à partir des plantes médicinales algériennes pour leurs utilisations dans la formulation des produits aux propriétés apaisantes, soutenu par TERZOUT, YETTOU Sarah, ADEL Riham, **Projet Startup**, le xx-xx-2024, Département de chimie, U. Blida1. **Dr. Yahi.**