

Curriculum Vitae
Scientific Research and
Professional Activities
Dr. Nicola Frison, PhD

February, 2016

Index

Nicola Frison: Curriculum Vitae	5
1 Personal Details	5
2 Education	5
3 Attendances at specializing courses	5
4 Professional Appointments.....	6
5 Research experience	6
5.1 Research period abroad	7
6 Spin-off company, University of Verona	8
7 Other activities.....	8
7.1 Teaching concerning water and wastewater treatment	8
7.2 Teaching in specializing courses related with municipal and industrial wastewater treatment	8
7.3 Certified teaching activities in foreign University	8
7.4 Technical-scientific consultancy	9
8 Award for research and innovation	9
9 Patents.....	9
10 Referee for international ISI journals or international projects	9
11 Member of international conferences	10
12 Participation at national and international projects funded.....	10
13 Main International Publications	10
13.1 Impact of the publications	10
13.2 Publications	10
13.3 Chapter books	13
13.4 Publications on SCOPUS ed ISI Web of Knowledge, without Impact Factor	13
13.5 Contributions on proceedings of national and international conferences..	14

Nicola Frison: Curriculum Vitae

1 Personal Details

Dr. Nicola Frison, PhD

Born in Montagnana (Italy), February 21st, 1985

University of Verona

Department of Biotechnology

via Strada Le Grazie 15, 37134, Verona

tel. +39 0452027964

cell. +39 349 8190001

E-mail: nicola.frison@univr.it



2 Education

-PhD in Environmental Science, University Ca' Foscari of Venice, 2015. Final dissertation: **“Novel biological sustainable solutions to optimize bioresource recovery and energy efficiency from downstream of anaerobic treatments”**.

-Interuniversity Master of Engineering (2^o Level, post-lauream), “Chemical Engineering for Environment” from the University of Verona, Venice, Padova, Udine, Trieste and Bologna. Final dissertation: **“Nitrogen removal from anaerobic digestate through the via-nitrite pathway in Sequencing Batch Reactor”**, 2011

-M.sc, Environmental Science, University Ca' Foscari of Venice, final grade 110/110. Final dissertation: **“Energy recovery from organic waste in the agro-industrial sector: case studies in Veneto Region”**, 2010.

-B.sc, Land use and Planning, University of Padua, final grade 106/110. Final dissertation: **“Hydrological Monitoring of a small alpine basin”**, 2007.

3 Attendances at specializing courses

Nicola Frison attended the 3rd Summerschool (2nd edition) “Innovative technologies for urban wastewater treatment plants: Short, intensive and highly specialised course focussed on innovative technologies emerging nowadays for the treatment of municipal wastewaters” on behalf of NOVEDAR_Consolider (CSD2007-00055), Santiago de Compostela (Spain), from 28th June to 4th June 2012.

Nicola Frison attended the 1st Training School Water 2020 “Energy recovery in anaerobic processes in wastewater and sludge processing” on behalf of Cost Action ES1202, Gliwice (PL), from 23rd to 28th of September 2013.

4 Professional Appointments

From March 2016, Nicola Frison is assistant professor (RTD type A) at the Department of Biotechnology, dealing with the integration of innovative biological systems in existing wastewater treatment plant for the valorisation of municipal wastewater and sewage sludge, recovery of phosphorus and biopolymers (polyhydroxyalkanoates).

October 2016, Nicola Frison was post-doc at the University of Verona financed by the Smart-Plant project (European Commission H2020), dealing on the design of the innovative biological pilot system for the production of polyhydroxyalkanoates and struvite recovery from municipal wastewater.

October 2015, Nicola Frison was post-doc researcher at the University of Verona financed by the ENERWATER project (European Commission H2020), dealing on the energy optimization of the biological nutrients removal processes for the wastewater treatment.

Position as post-doc researcher at the University of Verona financed by the LIFEWASTE project (LIFE 12 ENV/CY/000544), dealing on the design, supervision and optimization of a Sequencing Batch Reactor for the biological nutrients removal from zootechnical anaerobic digestate in Cyprus Island, 2014

Position as post-doc researcher at the University of Verona: the research line focused on the interaction between the anaerobic digestion of fermentable biowaste and the side stream biological nutrients removal (Financed project: VALORGAS – Valorisation of food waste to biogas, FP7 n. 241334), 2011.

5 Research experience

The research activities of Nicola Frison were complementary of the funded EU projects previously mentioned (Horizon2020, LIFE+ and FP7 programs).

The research activities of Nicola Frison have been focused on the following two main topics:

- 1) Advance and innovative biological processes for wastewater treatment:
 - Design, implementation, verification and validation of advanced biological processes for nitrogen and phosphorus removal via-nitrite from nitrogenous wastewater (e.g. anaerobic digestate of sewage sludge, zootechnical effluents) in pilot, demonstrative and full scale Sequencing Batch Reactor (SBR);
 - Treatment of low strength wastewater for nitrogen and phosphorus removal via-nitrite (e.g., nitrification and denitrification, deammonification);
 - Anaerobic treatment of high and low strength organic wastewater for COD removal and biogas production (e.g., Upflow Anaerobic Sludge Blanket).
- 2) Resource recovery from waste and wastewater:

- Production of polyhydroxyalkanoates (PHA) from mixed cultures using raw materials such as primary, secondary sludge and/or the organic fraction of municipal organic waste (OFMSW);
- Volatile Fatty Acids (VFAs) production and recovery through acidogenic fermentation of putrescible organic matter, (e.g. sewage sludge, OFMSW);
- Cellulose and phosphorus recovery (e.g. struvite) from sewage sludge and zootechnical effluents.

Nicola Frison was involved in other research topics as following reported:

- Fate and effects of pharmaceuticals on biological processes for nitrogen and phosphorus removal;
- Real-time control, automation and monitoring of biological processes for nitrogen and phosphorus removal;
- Technologies for removal of emerging compounds in municipal and industrial wastewater.

The research products were the scientific publications in peer-review journals (see publications reported in §13.2 - 13.4) and contributions at national and international conferences (see contributions reported in §13.5).

5.1 Research period abroad

Nicola Frison was granted for the “Short Term Scientific Mission (STSM)” by the COST Action ES1202. Hosted institute: REQUIMTE/CQFB in the Department of Chemistry, Science and Technology Faculty, New University of Lisbon). Local supervisor: Prof. Adrian Oehmen. Period of investigation: from October to December 2013.

The objective of the STSM was the INVESTIGATION AND OPTIMIZATION OF THE BIOLOGICAL PHOSPHORUS REMOVAL VIA NITRITE AND BIOPOLYMER PRODUCTION TREATING ANAEROBIC SUPERNATANT FROM SEWAGE SLUDGE DIGESTION. The products resulting from the STSM were the following scientific publications:

-N. Frison, E. Katsou, S. Malamis, A. Oehmen, F. Fatone Development of a Novel Process Integrating the Treatment of Sludge Reject Water and the Production of Polyhydroxyalkanoates (PHAs). «ENVIRONMENTAL SCIENCE AND TECHNOLOGY» vol. 49, 10877–10885.

-N. Frison, E. Katsou, S. Malamis, A. Oehmen, F. Fatone Nutrient removal via nitrite from reject water and polyhydroxyalkanoate (PHA) storage during nitrifying conditions «JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY» DOI 10.1002/jctb.4487

-N. Frison, E. Katsou, S. Malamis, F. Fatone, A. Oehmen, A novel PHA production and nitrification process for treating anaerobic supernatants in Conference Proceedings - ecoSTP2014 , Atti di "2nd IWA Specialized International Conference ecoSTP2014, EcoTechnologies for Wastewater Treatment: Technical, Environmental & Economic Challenges" , Verona (Italy) , 23-25 June 2014 , 2014

6 Spin-off company, University of Verona

Nicola Frison is co-founder of the spin-off company INNOVEN Srl (www.innoven.it). In October 2015, he became president of the company.

On behalf of INNOVEN Srl, Nicola Frison carries out activities for the development and transfer in the market of new innovative and sustainable bioprocesses for wastewater treatment, PHA production, energy and nutrients recovery from biowaste and wastewater.

According with these expertizes, INNOVEN Srl is beneficiary of the funded Horizon2020 “Innovative approaches to turn agricultural waste into ecological and economic assets (NOAW)” (H2020-WASTE-2015-two-stage, 2016).

7 Other activities

7.1 Teaching concerning water and wastewater treatment

He taught at the master course of “Chemical Engineering for Wastewater Treatment and Renewable Energies” (www.masteringegneriaambienteenergia.com), for the module on the respirometry methods for the evaluation of the wastewater treatment plants capacity with practical application in the laboratory, May 2014.

November 2014 to January 2015. Tutoring and practical laboratory activities for the course in Chemical Engineering for the Wastewater Treatment at the University of Verona.

He was co-tutor of more than 10 Master Thesis in Biotechnology, University of Verona.

7.2 Teaching in specializing courses related with municipal and industrial wastewater treatment

October 2015 and February 2016, he was lecturer in the specializing courses “Treatment of Industrial Wastewater” and “Advance Wastewater Treatment”. organized by Federazione delle Associazioni Scientifiche e Tecniche (FAST) (Coordinator Prof. Renato Vismara – Politecnico di Milano). Title of the lectures:

- 1) Inquinanti emergenti: evidenze e normativa;
- 2) La depurazione delle sostanze pericolose a bassi livelli: ozono, carbone attivo, etc.

7.3 Certified teaching activities in foreign University

Brunel University of London (UK), Department of Civil Engineering, teaching activities within the Water Engineering MSc. The teaching activities included fundamentals of municipal wastewater treatment and the resulting excess sludge, biological nutrient removal from wastewater, anaerobic treatment of wastewater and sewage sludge, solution of exercises on wastewater treatment, 2016

7.4 Technical-scientific consultancy

Nicola Frison was technical and operative advisor for the following projects:

-Zuegg Spa. Convenzione di collaborazione per studio delle misure di prevenzione della formazione di solfiti nelle acque reflue dello stabilimento Zuegg di via Francia a Verona.

-Fidia Farmaceutici SpA. Convenzione di collaborazione tecnico-scientifica per la verifica e l'ottimizzazione funzionale di processi e impianti biotecnologici del depuratore acque reflue aziendale.

-CAP holding. Convenzione per la stesura tecnico-scientifica di un masterplan per la gestione circolare delle acque reflue.

8 Award for research and innovation

Nicola Frison was awarded by AnoxKaldnes Cella™ Technologies – Veolia for the excellence in contribution to advancements in the science and engineering of PHA production and valorisation, September 2015.

9 Patents

Nicola Frison has the co-property of the following inventions:

- 1) n. MI2013A000946, data invention 10/06/2013, la quale recita “Processo per la purificazione di liquami municipali, zootecnici e/o industriali mediante rimozione di azoto ammoniacale e fosfati da un surnatante anaerobico”.
- 2) n. MI2014A002223, data invention 23/12/2014, “PROCESSO PER LA PREPARAZIONE DI BIOPLASTICHE”.

10 Referee for international ISI journals or international projects

Nicola Frison is reviewer for the following ISI journals:

Process Biochemistry (Elsevier), Chemical Engineering Journal (Elsevier), Water Science and Technology (IWA Publishing), Desalination (Elsevier), Industrial Engineering and Chemistry Research (ACS), Desalination and Water Treatment (Desalination Publications), Waste Management and Research (SAGE Journals), New Biotechnology (Elsevier), Waste Management (Elsevier).

Nicola Frison was the reviewer for a research proposal submitted to the *EXECUTIVE GOVERNMENT AGENCY OF NATIONAL SCIENCE CENTER (Narodowe Centrum Nauki – NCN; <http://www.ncn.gov.pl>), 2015*

11 Member of international conferences

Nicola Frison was member of the organizing committee for the international conference “Sustainable Solid Waste Management (<http://www.tinos2015.uest.gr/index.php/committees/organizing-committee>), Tinos island, Greece, 2015

12 Participation at national and international projects funded

Responsible for the start-up, validation and monitoring of the S.C.E.N.A. full scale project, Veneto Region: “Indagine in impianto pilota e sperimentazione in piena scala di tecnologia innovativa per la rimozione Via-nitrito di azoto e fosforo da surnatanti anaerobici”. (ALLEGATO A alla Dgr n. 754 del 21 maggio 2013).

Local Scientific Investigator for the Regional Project “Gara Comunitaria in più fasi per l’affidamento di un appalto pre-commerciale, ex art. 19 co. 1 lett. f) del D.Lgs. n. 163/2006, relativo a servizi di ricerca industriale e sviluppo sperimentale funzionali alla realizzazione di un nuovo sistema che consenta di minimizzare la produzione, migliorare la qualità e favorire il riuso dei fanghi nei processi di trattamento e depurazione delle acque reflue urbane., 2016

Local Scientific investigator for the Horizon2020 Project “Innovative approaches to turn agricultural waste into ecological and economic assets (NOAW)”, H2020-WASTE-2015-two-stage, 2016

Local Scientific Investigator of the European Project Water JPI WaterWorks2015 “Pioneer Sewage Treatment Plants (Pioneer_STP)”.

Principal investigator in local R&I Projects (e.g Joint Project ECO-REVAMP), 2016

Local Scientific Investigator for the LIFE+2012 ENVIRONMENTAL POLICY AND GOVERNANCE “Sustainable management of livestock waste for the removal/recovery of nutrients” (LIFELIVEWASTE) (LIFE10 ENV/CY/00544), 2014

13 Main International Publications

13.1 Impact of the publications

Source	Papers	Total citations	H (Hirsch) index
ISI Web of Knowledge	18	102	5
Scopus	19	107	6
Google Scholar	31	143	6
Research Gate	24	122	6

13.2 Publications

2017

1. N. Frison, V. Conca, G. Acleo, A. L. Eusebi, S. Lampis, F. Fatone Optimization of the Short-Cut Enhanced Nutrient Abatement (SCENA) system using fermented cellulosic primary sludge as carbon source «CHEMICAL ENGINEERING JOURNAL» Submitted.
Impact Factor = 5.31; Subject = Environmental Engineering
2. C. Tayà, **N. Frison**, A. Jelic, S. Lampis, S. Ponsá, F. Fatone. Aerobic feast and anoxic famine regime for PHA biomass selection: affecting the microbial community by the operating conditions.
«BIORESOURCE TECHNOLOGY» Submitted
Impact Factor = 4.97; Subject = Environmental Engineering

2016

3. L. Zuliani, **N. Frison**, A. Jelic, F. Fatone, D. Bolzonella, M. Ballottari. Microalgae cultivation on anaerobic digestate of municipal wastewater, sludge and agro-waste.
«INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES» . vol 17, 1692
Impact Factor = 3.26; Subject = Chemical Engineering
4. E Katsou, T Alvarino, S Malamis, S Suarez, **N Frison**, F Omil, F Fatone Effects of selected pharmaceuticals on nitrogen and phosphorus removal bioprocesses.
«CHEMICAL ENGINEERING JOURNAL» vol. 295, 509-517.
Impact Factor = 5.31; Subject = Environmental Engineering
5. N Basset, E Katsou, **N Frison**, S Malamis, J Dosta, F Fatone. Integrating the selection of PHA storing biomass and nitrogen removal via nitrite in the main wastewater treatment line.
«BIORESOURCE TECHNOLOGY» vol. 200, 820-829.
Impact Factor = 4.97; Subject = Environmental Engineering
6. **N Frison**, E Katsou, S Malamis, F Fatone. A novel scheme for denitrifying biological phosphorus removal via nitrite from nutrient-rich anaerobic effluents in a short-cut sequencing batch reactor Journal of «CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY» Vol 91 (1), 190-197.
Impact Factor = 2.74; Subject = Environmental Engineering

2015

1. **N. Frison**, E. Katsou, S. Malamis, A. Oehmen, F. Fatone Development of a Novel Process Integrating the Treatment of Sludge Reject Water and the Production of Polyhydroxyalkanoates (PHAs).
«ENVIRONMENTAL SCIENCE AND TECHNOLOGY» vol. 49, 10877–10885.
Impact Factor = 5.39; Subject = Environmental Engineering

2. **N. Frison**; A. Chiumenti; E. Katsou; S. Malamis; D. Bolzonella; F. Fatone, Mitigating off-gas emissions in the biological nitrogen removal via nitrite process treating anaerobic effluents
«JOURNAL OF CLEANER PRODUCTION» vol. 93, 2015, pp. 126-133
Impact Factor = 4.96; Subject = Environmental Engineering
3. S. Longo, E. Katsou, S. Malamis, **N. Frison**, D. Renzi, F. Fatone Recovery of volatile fatty acids from fermentation of sewage sludge in municipal wastewater treatment plants
«BIORESOURCE TECHNOLOGY» vol. 175, 2015, pp. 436-444
Impact Factor = 4.97; Subject = Energy and Fuels
4. E. Katsou, S. Malamis, **N. Frison**, F. Fatone Coupling the treatment of low strength anaerobic effluent with fermented biowaste for nutrient removal via nitrite
«JOURNAL OF ENVIRONMENTAL MANAGEMENT» vol. 149, 2015, pp. 108-117
Impact Factor = 3.13; Subject = Environmental Sciences
5. **N. Frison**, E. Katsou, S. Malamis, A. Oehmen, F. Fatone Nutrient removal via nitrite from reject water and polyhydroxyalkanoate (PHA) storage during nitrifying conditions
«JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY»
DOI 10.1002/jctb.4487
Impact Factor = 2.74; Subject = Chemical Engineering

2014

6. G. Rodriguez-Garcia, **N. Frison**, J.R. Vázquez-Padín, A. Hospido, J.M. Garrido, F. Fatone, D. Bolzonella, M.T. Moreira, G. Feijoo, Life cycle assessment of nutrient removal technologies for the treatment of anaerobic digestion supernatant and its integration in a wastewater treatment plant
«SCIENCE OF THE TOTAL ENVIRONMENT» , vol. 490 , 2014 , pp. 871-879
Impact Factor = 3.98; Subject = Environmental Sciences
7. E. Katsou, **N. Frison**, S. Malamis, F. Fatone, Use of external carbon sources derived from biowaste for short-cut nutrient removal from anaerobic effluents
«WATER SCIENCE & TECHNOLOGY» , vol. 69 , 2014 , pp. 1853-1858
Impact Factor = 1.21; Subject = Water Resources
8. Malamis, S. , Katsou, E., Di Fabio, S., **Frison**, N., Cecchi, F., Fatone, F. Treatment of petrochemical wastewater by employing membrane bioreactors: a case study of effluents discharged to a sensitive water recipient
«DESALINATION AND WATER TREATMENT» pp. 53, 2015, 3397–3406
Impact Factor = 1.27; Subject = Chemical Engineering

2013

9. S. Malamis, E. Katsou, **N. Frison**, S. Di Fabio, C. Noutsopoulos, F. Fatone, Start-up of the completely autotrophic nitrogen removal process using low activity anammox inoculum to treat low strength UASB effluent

«BIORESOURCE TECHNOLOGY», vol. 148 , 2013 , pp. 467-473
Impact Factor = 4.98; Subject = Energy and Fuels

10. **N. Frison**, S. Di Fabio, C. Cavinato, P. Pavan, F. Fatone, Best available carbon sources to enhance the via-nitrite biological nutrients removal from supernatants of anaerobic co-digestion
«CHEMICAL ENGINEERING JOURNAL», vol. 215 , 2013 , pp. 15-22
Impact Factor = 5.31 Subject = Chemical Engineering
11. **N. Frison**, E. Katsou, S. Malamis, D. Bolzonella, F. Fatone, Biological nutrients removal via nitrite from the supernatant of anaerobic co-digestion using a pilot-scale sequencing batch reactor operating under transient conditions
«CHEMICAL ENGINEERING JOURNAL», vol. 230 , 2013 , pp. 595-604
Impact Factor = 5.31 Subject = Chemical Engineering

2012

12. Letizia Zanetti, **Nicola Frison**, Elisa Nota, Martino Tomizioli, David Bolzonella, Francesco Fatone, Progress in real-time control applied to biological nitrogen removal from wastewater. A short-review
«DESALINATION», 286 , 2012 , pp. 1-7
Impact Factor = 4.41; Subject = Chemical Engineering
13. **Frison N.**; Lampis Silvia; Bolzonella David; Pavan Paolo; Fatone Francesco, Two-Stage Start-Up to Achieve the Stable via-Nitrite Pathway in a Demonstration SBR for Anaerobic Codigestate Treatment
«INDUSTRIAL AND ENGINEERING CHEMISTRY RESEARCH» , vol. 51 , 2012 , pp. 15423-15430
Impact Factor = 2.57; Subject = Chemical Engineering

13.3 Chapter books

2016

1. D. Crutchik, **N. Frison**, C. Tayà, S. Ponsá, F. Fatone. Chapter 2: “Chemical and biological processes for nutrients removal and recovery”, submitted to “Technologies for the Treatment and Recovery of Nutrients from Industrial Wastewater”. Editorial Discovery, June 2016.

2015

2. D. Renzi, S. Longo, **N. Frison**, S. Malamis, E. Katsou, F. Fatone Short-cut enhanced nutrient removal from anaerobic supernatants: Pilot scale results and full scale development of the S.C.E.N.A. process. Chapter 16 in: Sewage Treatment Plants: Economic Evaluation of Innovative Technology for Energy Efficiency. Integrated Environmental Technology Series. Stamatelatou and Tsagarakis (Eds.). IWA Publishing, 2015

13.4 Publications on SCOPUS ed ISI Web of Knowledge, without Impact Factor

2014

1. E. Katsou, S. Malamis, **N. Frison**, F. Fatone. Effect of nitrite and external carbon source on the via nitrite biological phosphorus removal 2014 «CHEMICAL ENGINEERING TRANSACTIONS» Vol. 38, 2014, Pages 25-30

2013

2. **N. Frison**, L. Zanetti, E. Katsou, S. Malamis, F. Cecchi, F. Fatone. Production and use of short chain fatty acids to enhance the via-nitrite biological nutrients removal from anaerobic supernatant «CHEMICAL ENGINEERING TRANSACTIONS» Vol. 32, 2013, Pages 157-162

2011

3. F. Fatone, M. Dante, E. Nota, S.D. Fabio, **N. Frison**, P. Pavan, Biological short-cut nitrogen removal from anaerobic digestate in a demonstration sequencing batch reactor «CHEMICAL ENGINEERING TRANSACTIONS» Volume 24, 2011, Pages 1135-1140

13.5 Contributions on proceedings of national and international conferences

2017

N. Frison, V. Conca, G. Aceo, A. L. Eusebi, F. Fatone. Lab scale validation of enhanced biological phosphorus removal via-nitrite using cellulosic primary sludge as carbon source. Frontiers International Conference on Wastewater Treatment. Palermo, 21-24 May, 2017

Cherubin A, **N. Frison**, A. L. Eusebi, F. Fatone. Recovery of Volatile Fatty Acids from cellulosic sludge to enhance phosphorus bio-uptake or PHA production. 5th International Conference on Sustainable Solid Waste Management, 21-24 June 2017

2016

1. T. Alvalino, **N. Frison**, E. Katsou, S. Malamis, F. Fatone, F. Omil. Effect Of Pharmaceutical Products On The Biological Nutrient Removal Via Nitrite. 3rd IWA Specialized International Conference “ECOTECHNOLOGIES FOR WASTEWATER TREATMENT” (ecoSTP16), Cambridge (UK), 27-30 June 2016.
2. **N. Frison**, D. Crutchik, A. Mattioli and F. Fatone. Volatile Fatty Acids and phosphorus recovery from cellulosic primary sludge. 3rd IWA Specialized International Conference “ECOTECHNOLOGIES FOR WASTEWATER TREATMENT” (ecoSTP16), Cambridge (UK), 27-30 June 2016.
3. B. M. D’Antoni, **N. Frison**, F. Fatone. Basic conductivity-based real time control to start-up and steady-state complete or partial nitrification-denitrification in a SBR treating reject water. 3rd IWA Specialized International Conference “ECOTECHNOLOGIES FOR WASTEWATER TREATMENT” (ecoSTP16), Cambridge (UK), 27-30 June 2016.

4. N. Herrero Garcia, D. Crutchik, **N. Frison**, A. Jelic and F. Fatone. Phosphorus recovery and VFAs production from sewage sludge fermentation. 4th International Conference on Sustainable Solid Waste Management, Limassol (Cyprus), 23-25 June, 2016.
5. L. Lijó, N. Voulvoulis, **N. Frison**, S. González-García, M. T. Moreira, E. Katsou. Comparative environmental analysis of anaerobic mono-digestion and co-digestion of organic waste. 4th International Conference on Sustainable Solid Waste Management, Limassol (Cyprus), 23-25 June, 2016.
6. **N. Frison**, F. Fatone, D. Bolzonella. Nutrients recovery from anaerobic digestate of agr-waste: techno-economic assessment of full scale applications. 4th International Conference on Sustainable Solid Waste Management, Limassol (Cyprus), 23-25 June, 2016.
7. **N. Frison**, C. Tayà, M. D'Antoni, F. Fatone Selection of PHA storing biomass under aerobic feast and anoxic famine regime for nitrogen removal via-nitrite from anaerobic supernatant. IWA 8th Eastern European Young Water Professionals Conference. Gdansk (PL), May 2016.
8. **N. Frison**, E. Katsou, S. Malamis, A. Oehmen, F. Fatone. Short-cut Enhanced polyhydroxyalkanoates recovery from sewage sludge. XXI IUPAC CHEMRAWN Conference on "Solid Urban Waste Management" Rome (Italy), 7 April, 2016
9. F.Fatone, **N. Frison**, D. Renzi. Integrazione energeticamente efficiente della linea fanghi di impianti esistenti con sistemi via-nitrito. Innovative wastewater treatment technologies for the energy saving and environmental protection. Palermo (Italy), 20 May, 2016.

2015

10. D. Renzi, **N. Frison**, S. Longo, A. Piasentin, F. Fatone. The first full scale application of the short-cut enhanced nutrients abatement (S.C.E.A.) system at the Carbonera WWTP (Veneto Region, Italy). Ecomondo, Rimini (Italy) 5 November, 2015.
11. **N. Frison**, S. Lampis, D. Crutchik, C. Tayà, F. Fatone Integrating the selection of PHA storing biomass and nitrogen removal via-nitrite for the treatment of the sludge reject water. ESBP2015 - 8th European Symposium on Biopolymers, Rome (Italy), 16-18 September 2015, 2015
12. Aleksandra Jelic, **Nicola Frison**, Silvia di Fabio, Franco Cecchi, Francesco Fatone Monitoring trace PCBs in large industrial centralized wastewater treatment plant. IWA Balkan Young Water Professionals 2015 Thessaloniki, (Greece), 10-12 May 2015
13. **Nicola Frison**, Stefano Longo, Daniele Renzi, Francesco Fatone Short-Cut Enhanced Nutrients Abatement (SCENA) From Reject Water: Moving The System Into Practice. IWA Nutrient Removal and Recovery 2015: moving innovation into practice. Gdansk (Poland), May 18-21, 2015

2014

14. E. Katsou, Simos Malamis, **Nicola Frison**, Francesco Fatone, Effect of nitrite and external carbon source on the via nitrite biological phosphorus removal , Atti di "IBIC 2014 4th International Conference on Industrial Biotechnology" , Rome (Italy) , 8-11 June, 2014 , 2014
15. E. Katsou, S. Malamis, **N. Frison**, F. Fatone. Assessing alternative treatment schemes for the decentralized co-treatment of domestic organic waste and wastewater , Atti di "12th IWA Specialist Conference on Small Water and Wastewater Systems & 4th IWA Specialist Conference on Resource Oriented Sanitation" , Muscat, Sultanate of Oman , 2-4 November 2014 , 2014.
16. **N. Frison**, E. Katsou, S. Malamis, F. Fatone, A. Oehmen, A novel PHA production and nitrification process for treating anaerobic supernatants in Conference Proceedings - ecoSTP2014 , Atti di "2nd IWA Specialized International Conference ecoSTP2014, EcoTechnologies for Wastewater Treatment: Technical, Environmental & Economic Challenges" , Verona (Italy) , 23-25 June 2014 , 2014
17. S. Malamis, **N. Frison**, E. Katsou, D. Bolzonella, F. Fatone, Applying the autotrophic nitrogen removal process for the treatment of anaerobic pig slurry in Conference Proceedings - ecoSTP2014 a cura di Roberto Canziani , Francesco Fatone and Evangelia Katsou , Atti di "2nd IWA Specialized International Conference - ecoSTP2014 - EcoTechnologies for Wastewater Treatment: Technical, Environmental & Economic Challenges" , Verona (Italy) , 23-25 June 2014 , 2014 ,
18. E. Katsou, **N. Frison**, S. Malamis, A.Oehmen., F. Fatone, Impact Of External Carbon Source In Via Nitrite Treatment Of The Sludge Anaerobic Supernatant

in Conference Proceedings - ecoSTP2014 a cura di Roberto Canziani , Francesco Fatone and Evangelia Katsou , Atti di "2nd IWA Specialized International Conference - ecoSTP2014 - EcoTechnologies for Wastewater Treatment: Technical, Environmental & Economic Challenges" , Verona (Italy) , 23-25 June 2014 , 2014

19. E. Katsou, S. Malamis, A. Jelic, **N. Frison**, F. Cecchi, F. Fatone, Integrated UASB-SBR scheme for the co-treatment of domestic wastewater and organic waste in Conference Proceedings - ecoSTP2014 , Atti di "2nd IWA Specialized International Conference - ecoSTP2014 - EcoTechnologies for Wastewater Treatment: Technical, Environmental & Economic Challenges" , Verona (Italy) , 23-25 June 2014 , 2014
20. N. Basset, E. Katsou, **N. Frison**, S. Malamis, A. Jelic, F. Fatone, Integrating the selection of PHA storing biomass and nitrogen removal via nitrite in the main wastewater treatment line in Conference Proceedings - ecoSTP2014 a cura di Roberto Canziani , Francesco Fatone and Evangelia Katsou , Atti di "2nd IWA Specialized International Conference - ecoSTP2014 - EcoTechnologies for Wastewater Treatment: Technical, Environmental & Economic Challenges" , Verona (Italy) , 23-25 June 2014 , 2014
21. S. Longo, **N. Frison**, E. Katsou, S. Malamis, D. Renzi, F. Fatone, Optimization and impact of sludge alkaline fermentation on nutrient removal from sewage in Conference Proceedings - ecoSTP2014 a cura di Roberto Canziani , Francesco Fatone and Evangelia Katsou , Atti di "2nd IWA Specialized International Conference - ecoSTP2014 - EcoTechnologies for Wastewater Treatment: Technical, Environmental & Economic Challenges" , Verona (Italy) , 23-25 June 2014 , 2014
22. F. Fatone, **N. Frison**, E. Katsou, S. Longo, S. Malamis, A. Piasentin, D. Renzi, Short-cut enhanced nutrient abatement (SCENA) from anaerobic supernatant at pilot and full scale in Conference Proceedings - ecoSTP2014 a cura di Roberto Canziani , Francesco Fatone and Evangelia Katsou , Atti di "2nd IWA Specialized International Conference - ecoSTP2014 - EcoTechnologies for Wastewater Treatment: Technical, Environmental & Economic Challenges" , Verona (Italy) , 23-25 June 2014 , 2014
23. S. Longo, **N. Frison**, E. Katsou, S. Malamis, D. Renzi, L. Lijò, F. Fatone, Valorization of sewage sludge for via nitrite nutrients removal from anaerobic effluents , Atti di "Wastewater and Biosolids Treatment and Reuse (WBTR): Bridging Modeling and Experimental Studies." , Otranto (Italy) , June 8-14, 2014 , 2014

2013

24. **N. Frison**, E. Katsou, S. Malamis, S. Di Fabio, F. Fatone, Enhanced via-nitrite phosphorus removal from nitrogenous anaerobic supernatant in a sequencing batch reactor. , Atti di "13th World Congress on Anaerobic Digestion" , Santiago de Compostela , 25-28 June 2013 , 2013
25. Rodriguez-Garcia, **N. Frison**, J.R. Vazquez-Padin, A. Hospido, J. Garrido, F. Fatone, D. Bolzonella, M.T. Moreira, G. Feijoo, Environmental burdens of

nutrient removal technologies for the treatment of anaerobic digestion supernatant and its integration in a sewage treatment plant. , Atti di "13th World Congress on Anaerobic Digestion" , Santiago de Compostela , 25-28 June 2013 , 2013

26. Rodriguez-Garcia, **N. Frison**, A. Hospido, F. Fatone, D. Bolzonella, M.T. Moreira, G. Feijoo. Environmental cost of using different carbon sources for a nitrite Short-Cut Sequential Bioreactor treating anaerobic supernatant. , Atti di "13th World Congress on Anaerobic Digestion" , Santiago de Compostela , 25-28 June 2013 , 2013
27. C. da Ros, C. Cavinato, **N. Frison**, P. Pavan, D. Bolzonella. Acid fermentation of manure and maize silage to support nitrogen removal of anaerobic supernatant: temperature and hydraulic retention time effect. Atti di "13th World Congress on Anaerobic Digestion" , Santiago de Compostela , 25-28 June 2013 , 2013
28. **N. Frison**, E. Katsou, S. Malamis, F. Cecchi, F. Fatone. Implementation of indirect real time process control and monitoring in a via-nitrite sequencing batch reactor treating nitrogenous anaerobic supernatant. Atti di "13th World Congress on Anaerobic Digestion" , Santiago de Compostela , 25-28 June 2013 , 2013
29. **N. Frison**, A. Chiumenti, E. Katsou, S. Malamis, D. Bolzonella, F. Fatone, Mitigating gaseous emissions in the biological nitrogen removal via nitrite process treating anaerobic effluents , Atti di "IWA Regional Conference on Waste and Wastewater Management, Science and Technology," , Limassol, Cyprus , 27-28 June 2013 , 2013
30. E. Katsou, S. Malamis, **N. Frison**, J. Santos Silva, V. Grace Barros, F. Fatone,, The effect of nitrogen loading rate on short-cut nutrients removal from low strength UASB effluent for decentralized communities , Atti di "IWA Regional Conference on Waste and Wastewater Management, Science and Technology" , Limassol, Cyprus , 27-28 June 2013 , 2013
31. **N. Frison**, F. Toniolo, E. Katsou, S. Malamis, F. Fatone, Using alternative external carbon sources for enhanced nutrients removal via-nitrite from the anaerobic supernatant of WAS and OFMSW in a Sequencing Batch Reactor , Atti di "Asset Management for Enhancing Energy Efficiency in Water and Wastewater" , Marbella (Spain) , 24-26 April 2013 , 2013

2012

32. Rodriguez-Garcia G.; **Frison N.**; Vázquez J.; Hospido A.; Fatone F., Bolzonella D.; Moreira M.T; Feijoo G., Environmental comparison of N and P removal technologies for the treatment of anaerobic digestion supernatant , Atti di "ecoSTP" , Santiago de Compostela , 25-27/06/2012 , 2012
33. **Frison N.**, Katsou E., Malamis S., Di Fabio S., Pavan P., Cavinato C., Fatone F., Nitrification-denitrification and enhanced via nitrite biological phosphorus removal from the liquid resulting from the anaerobic co-digestion of WAS and

OFMSW , Atti di "Sustainable solid waste management" , Athens - Greece
, 28-29 June 2012 , 2012

2011

34. Bolzonella D., Cavinato C., Fatone F., **Frison N.**, Pavan P., Anaerobic digestion of livestock effluents, energy crops and agro-waste: renewable energy potential and nutrients management , Atti di "IWA specialist international conference ADSW&EC 2011" , Vienna - Austria , 28 Aug-01 Sept 2011 , 2011

35. Fatone F., **Frison N.**, Lampis S., Pavan P., Bolzonella D., Two-stage start-up of a demonstration SBR treating anaerobic digestate of WAS and OFMSW for short-cut nitrogen removal , Atti di "IWA specialist international conference ADSW&EC 2011" , Vienna - Austria , 28 Aug-01 Sept 2011 , 2011

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Nicola Frison