PERSONAL INFORMATION

# Stefano Cinti

JOB POSITION

## Professore Associato in Chimica Analitica

PROFESSIONAL EXPERIENCE

04/2022 – now

### Associate Professor in Analytical Chemistry (CHIM/01)
University of Naples "Federico II", Department of Pharmacy (Excellence Dept. 2018-2022), Naples, Italy

04/2019 – 04/2022

### Assistant Professor in Analytical Chemistry (CHIM/01)

University of Naples "Federico II", Department of Pharmacy (Excellence Dept. 2018-2022), Naples, Italy.

http://www.uninanobiosensors.com/

- Teaching of "Environmental Chemometrics and Toxicological Data (9 credits)". The research activity is focused on the development of analytical platforms to be applied in the clinical, pharmaceutical, environmental and food fields. Head of the "Uninanobiosensors" research group, in which electrochemical sensors and biosensors are developed through the use of nanomaterials, microfabrication techniques and sustainable materials.
- Recently published a protocol for the production of paper sensors and biosensors in the journal Nature Protocol (Nat. Protoc. 14 (2019) 2437-245).

01/2019 – 04/2019

### Marie Skłodowska-Curie Post-doc Fellow

Universitat Autònoma de Barcelona, Institut Català de Nanociencia i Nanotecnologia (ICN2), Barcelona, Spain.

Supervisor: Prof. Arben Merkoçi (Nanobioelectronics and Biosensors group)

http://www.nanobiosensors.org/

- Winner of a scholarship under H2020 – EU. Marie Skłodowska-Curie Actions Individual Fellowship with the project "SHINE" Proposal number: 794007 (158K Euro). Development of a liquid biopsy platform on paper for diagnosis and therapeutic monitoring of breast cancer patients .
- The results of this research have been published in the journal Analytical Chemistry (Anal. Chem. 92 (2020) 1674-1679).

01/2017 – 12/2018

### Post-Doc Fellow Fondazione Umberto Veronesi

University of Rome "Tor Vergata", Department of Chemical Science and Technologies, Rome, Italy.

https://www.fondazioneveronesi.it/ricerca/i-nostri-ricercatori/stefano-cinti

- Winner of two scholarships of Fondazione Umberto Veronesi, one year each (2017, 2018), for cancer research. The funded research project concerns the development of an analytical device for the early diagnosis of breast cancer, analyzing a drop of blood from the patient.
- Interviewed on "Huffington Post" 10/10/2017: http://www.huffingtonpost.it/2017/10/10/il-mio-dispositivo-consentira-a-chiunque-di-diagnosticare-un-tumore-al-seno-con-una-sola-goccia-di-sangue_a_23237609/.
- Article published on "Corriere della Sera", 14/10/2017 and Corriere.it: http://www.corriere.it/salute/sportello_cancro/17_ottobre_17/tumore-seno-la-mia-sfida-sensore-la-diagnosi-precoce-bc152b16-b364-11e7-9cef-7c546dada489.shtml.

- The results of this research have been published in the journal Analytical Chemistry (Anal. Chem. 90 (2018) 13680-13686).

09/2015 – 12/2018

### Lecturer of General Chemistry (CHIM/07)

University Niccolò Cusano, Departmenr of Engineering, Rome, Italy.

http://www.unicusano.it/images/pdf/CorsiLaurea/ingegneria/L7_chimica_generale_CINTI.pdf

- Teaching of "General Chemistry (12 credits)". Frontal lessons in the presence of students and distance lessons on the E-learning platform. Management of the E-learning platform and management of the forum concerning the virtual class and recovery class exercises.

06/2017

### Visiting Post-Doc

Technische Universität Chemnitz, Department of Digital Printing and Imaging Technology, Chemnitz, Germany.

Supervisor: Prof. Reinhard R. Baumann

http://bpr.mb.tu-chemnitz.de/ij-technikum/bpr.php

- Optimization of the inkjet-printing technique for the production of electrodes on flexible and paper supports.
- The results of this research have been published in the journal Sensors and Actuators B: chemical (Sens. Actuators B 265 (2018) 155-160.

01/2016 - 12/2016

### Post-doc

University of Rome “Tor Vergata”, Department of Chemical Science and Technologies, Rome, Italy.

Supervisor: Prof. Giuseppe Palleschi

http://www.nanobiosensing.com/

- Development of electrochemical sensors obtained on paper for monitoring the pollution of environmental matrices (soil, river, lake, waste water), for food surveillance and for clinical diagnosis in blood and sweat samples.
- - This activity led to the publication of many articles published in scientific journals (see “Publications”)

06/2016 - 09/2016

### Visiting Post-Doc

University of California Santa Barbara, Department of Chemistry and Biochemistry, Santa Barbara, CA, USA.

Supervior: Prof. Kevin W. Plaxco

https://labs.chem.ucsb.edu/plaxco/kevin/research/ - kevinplaxco

- Design and evaluation of oligonucleotide aptamers for clinical diagnosis applications, manufacture of electrochemical sensors based on conformational change for in vivo applications and measurements of anti-tumor drugs with gold microelectrodes in guinea pigs.
- This activity allowed to be financed by the Fondazione Umberto Veronesi and MSCA-EU.

06/2014 - 12/2014

### Visiting PhD student

University of California San Diego, Department of Nanoengineering, La Jolla, CA, USA.

Supervisor: Prof. Joseph Wang

http://joewang.ucsd.edu/

- Production of wearable electrodes for the determination of ethyl alcohol in sweat, development and characterization of electrochemical sensors based on screen-printing technology for the determination of nerve agents in environmental matrices, synthesis and characterization of nanomotors for the remediation of polluted sites.
- The results of this research have been published in the journal ACS Sensors: (ACS Sens. 1 (2016) 1011-1019.

06/2013 - 12/2013

### Visiting PhD student

University of the West of England, Department of Biological, Biomedical and Analytical Sciences, Faculty of Health and Applied Sciences, Bristol, UK.

Supervisor: Prof. Anthony J. Killard

http://www1.uwe.ac.uk/hls/bbas.aspx

- Synthesis of nanoparticles of a catalyst (prussian blue) for the electro-reduction of hydrogen peroxide and manufacture of an enzymatic biosensor for the determination of free cholesterol in the blood serum.
- The results of this research have been published in the journal Sensors and Actuators B: chemical: (Sens. Actuators B 221 (2015) 187-190).

04/2012 - 06/2012

### Visiting Scientist

Oulu University of Applied Science, BioPrint Lab,1, Oulu, Finlandia

Supervisor: Dr. Marja Nissinen

http://www.oamk.fi/hankkeet/bioprint/

- Development and characterization of printed electrochemical sensors for the determination of glucose in the blood.

04/2011 - 09/2011

### Stageur

BASF – The Chemical Company, Catalysis Division, Rome, Italy.

- Analysis of arsenic and mercury in water using atomic absorption spectroscopy and inductively coupled plasma mass spectrometry. Heavy metal measurement protocol optimization with inductively coupled plasma mass spectrometry (ICP-MS)

## FORMATION

11/2012 - 01/2016

### PhD in Chemical Sciences (XXVIII Cycle)

University of Rome “Tor Vergata”, Department of Chemical Science and Technologies, Rome, Italy.

Thesis title: Nano/micromaterial-driven electroanalysis enhancement: facile approaches to improve (bio)sensing.

Supervisor: Prof. Giuseppe Palleschi.

Marks: Excellent summa cum laude

- Evaluation of new nano and microstructured materials to improve the analytical performance of methods based on printed electrodes, with applications in the environmental field.

09/2009 - 03/2012

### Master Degree in Chemistry (Class LM-54)

University of Rome “Tor Vergata”, Department of Chemical Science and Technologies, Rome, Italy.

Thesis title: Development of an electrochemical sensor modified with carbon black and gold nanoparticles for the determination of As (III) in drinking water.

Supervisors: Dr. Fabiana Arduini, Prof. Giuseppe Palleschi.

Marks: 110/110 summa cum laude

- Fabbricazione, caratterizzazione e applicazione di un elettrodo stampato modificato con un nanocomposito a base di carbon black e nanoparticelle d’oro per determinare la presenza di As(III) in acqua potabile. Il metodo sviluppato è stato confrontato positivamente con il metodo di analisi di riferimento, l’assorbimento atomico grazie ad una collaborazione con BASF – Divisione Catalizzatori (Roma, Italia).

10/2006 - 09/2009

### Bachelor Degree in Chemistry (Class L-27)

University of Rome “Tor Vergata”, Department of Chemical Science and Technologies, Rome, Italy.

Thesis title: Study of the aggregation mechanism of porphyrin derivatives.

Supervisor: Dr. Donato Monti.

Marks: 110/110 summa cum laude

- Study of the mechanism of aggregation of porphyrins with inherent chirality. Evaluation, through spectroscopic absorption techniques in the visible and circular dichroism, of the chirality observed in the formation of the aggregates.

## AWARDS AND PRIZES

### Research Grant

4. Canon Foundation in Europe 2020 Research Grant (3600 Euro).

3. Marie Skłodowska-Curie Actions Individual Fellowship, Funding scheme: MSCA-IF-EF-ST, Starting 2019, Proposal number: 794007, Proposal acronym: SHINE (158000 Euro).

2. Postdoctoral Fellowship 2018 - Fondazione Umberto Veronesi (27000 Euro).

1. Postdoctoral Fellowship 2017 - Fondazione Umberto Veronesi (27000 Euro).

### Prizes

9. Premio Italia Giovane 2020 – Special Mention on Clinical Research

8. Best Young researcher 2019 in Analytical Chemistry from the Analytical Division Italian Chemical Society (500 Euro).

7. YERUN Research Mobility Award 2018-2019 (1000 Euro).

6. Best Young researcher 2018 in Bioanalytical Chemistry from the Bioanalytical Division Italian Chemical Society.

5. Best Poster Award at Swiss Symposium in Point-of-Care Diagnostics 2018 (500 CHF).

4. FameLab 2018, L'Aquila – Winner of local section on science communication.

3. Winner of C Travel Award 2017 by "Journal of Carbon Research, MDPI" (800 CHF).

2. Best PhD thesis in Electrochemistry 2016 from Italian Chemical Society sponsored by "Fondazione De Nora" (1000 euro).

1. Third prize in "Chemistry and Light Contest" (2015) organized by ChemistryViews.org, with an essay titled "Chirality helps light to strike cancer".

## NATIONAL SCIENTIFIC QUALIFICATION (ASN in Italian)

2022: 03/A1 Sector – Analytical Chemistry, Full Professor.

## ISTITUTIONAL ROLES

2020, 2021, 2022: Chair of the conference AMYC-BIOMED 2020

2020: Member of the board of the Junior Chamber International - Roma Capitolina. Role: Vice-President of internationalism.

2019-2021: Member of the board of the Young Group of the Italian Chemical Society - Coordinator of the "Analytical Chemistry" division.

2018-2020: Member of the board of the Interdivisional Group "Dissemination of Chemical Culture" of the Italian Chemical Society – Councilor.

EDITORIAL ROLES

Chemosensors (MDPI) - Topic Editor
https://www.mdpi.com/journal/chemosensors/topic_editors

MethodsX - Advisory Board Editor, Chemistry
https://www.journals.elsevier.com/methodsx/editorial-board

SCIENTIFIC PRODUCTION

Publications **Scientific Journals**

42. C. Parolo, A. Sena-Torralba, J.F. Bergua, E. Calucho, C. Fuentes-Chust, L. Hu, L. Rivas, R. Álvarez-Diduk, E.P. Nguyen, **S. Cinti**, D. Quesada-González, A. Merkoçi. Tutorial: design and fabrication of nanoparticle-based lateral-flow immunoassays. Nature Protocols (2020) DOI: 10.1038/s41596-020-0357-x.

41. V. Kumar, A.K. Sinha, A. Uka, A. Antonacci, V. Scognamiglio, V. Mazzaracchio, **S. Cinti**, F. Arduini. Multi-potential biomarkers for seafood quality assessment: global wide implication for human health monitoring. TrAC Trends in Analytical Chemistry (2020) 116056.

40. **S. Cinti (Corr. Author)**, R. Marrone, V. Mazzaracchio, D. Moscone, F. Arduini. Novel bio-lab-on-a-tip for electrochemical glucose sensing in commercial beverages. Biosensors and Bioelectronics 165 (2020) 112334.

39. M. Moccia, V. Caratelli, **S. Cinti**, B. Pede, C. Avitabile, M. Saviano, A.L. Imbriani, D. Moscone, F. Arduini. Paper-based electrochemical peptide nucleic acid (PNA) biosensor for detection of miRNA-492: A pancreatic ductal adenocarcinoma biomarker. Biosensors and Bioelectronics (2020), DOI: 10.1016/j.bios.2020.112371.

38. **S. Cinti (Corr. Author)**. Covid-19: Physical distancing will make science closer to citizen participation in decision making. Substantia 4 (2020) 1.

37. F. Arduini, **S. Cinti**, V. Mazzaracchio, V. Scognamiglio, A. Amine, D. Moscone, D. Carbon black as an outstanding and affordable nanomaterial for electrochemical (bio) sensor design. Biosensors and Bioelectronics, 156 (2020) 112033.

36. **S. Cinti (Corr. Author)**, G. Cinotti, C. Parolo, E.P. Nguyen, V. Caratelli, D. Moscone, F. Arduini, A. Merkoçi. Experimental Comparison in Sensing Breast Cancer Mutations by Signal ON and Signal OFF Paper-Based Electroanalytical Strips. Analytical Chemistry 92 (2020) 1674-1679.

35. **S. Cinti (Corr. Author)**. Chemistry as building block for a new knowledge and participation. Substantia 3 (2019) 25-27.

34. **S. Cinti (Corr. Author)**, D. Moscone, F. Arduini. Preparation of paper-based devices for reagentless electrochemical (bio) sensor strips. Nature Protocols, 14 (2019) 2437-2451.

33. N. Bagheri, **S. Cinti (Corr. Author)**, V. Caratelli, R. Massoud, M. Saraji, D. Moscone, F. Arduini. A 96-well wax printed Prussian Blue paper for the visual determination of cholinesterase activity in human serum. Biosensors and Bioelectronics 134 (2019) 97-102.

32. M.R. Tomei, **S. Cinti (Corr. Author)**, N. Interino, V. Manovella, D. Moscone, F. Arduini. Paper-based electroanalytical strip for user-friendly blood glutathione detection. Sensors and Actuators B: Chemical 294 (2019) 291-297.

31. **S. Cinti (Corr. Author)**. Novel paper-based electroanalytical tools for food surveillance. Analytical and bioanalytical chemistry (2019) DOI:10.1007/s00216-019-01640-5.

30. **S. Cinti (Corr. Author)**, E. Proietti, F. Casotto, D. Moscone, F. Arduini. Paper-Based Strips for the Electrochemical Detection of Single and Double Stranded DNA. Analytical Chemistry 90 (2018) 13680-13686.

29. F. Arduini, **S. Cinti**, V. Caratelli, L. Amendola, G. Palleschi, D. Moscone. Origami multiple paper-based electrochemical biosensors for pesticide detection. Biosensors and Bioelectronics 126 (2019) 346-354.

28. A. Amine, **S. Cinti**, F. Arduini, D. Moscone, G. Palleschi. How to extend range linearity in enzyme inhibition-based biosensing assays. Talanta 189 (2018) 365-369.

27. **S. Cinti**, F. Limosani, M. Scarselli, F. Arduini. Magnetic carbon spheres and their derivatives combined with printed electrochemical sensors. Electrochimica Acta 282 (2018) 247-254.

26. **S. Cinti (Corr. Author)**, V. Mazzaracchio, G. Öztürk, D. Moscone, F. Arduini. A Lab-on-a-tip approach to make electroanalysis user-friendly and de-centralized: detection of copper ions in river water. Analytica Chimica Acta 1029 (2018) 1-7.

25. **S. Cinti (Corr. Author)**, R. Cusenza, D. Moscone, F. Arduini. Paper-based synthesis of Prussian Blue Nanoparticles for the development of whole blood glucose electrochemical biosensor. Talanta 187 (2018) 59-64.

24. **S. Cinti**, N. Colozza, I. Cacciotti, D. Moscone, M. Polomoshnov, E. Sowade, R.R. Baumann, F. Arduini. Electroanalysis moves towards paper-based printed electronics: carbon black nanomodified inkjet-printed sensor for ascorbic acid detection as a case study. Sensors and Actuators B: Chemical 265 (2018) 155-160

23. **S. Cinti (corr. Author).** Polymeric Materials for Printed-Based Electroanalytical (Bio)Applications. Chemosensors 5 (2017) 31-46.

22. **S. Cinti (co-corr. Author)**, L. Fiore, R. Massoud, C. Cortese, D. Moscone, G. Palleschi, F. Arduini. Low-cost and Reagent-free Paper-based Device to Detect Chloride Ions in Serum and Sweat. Talanta 179 (2018) 186-192.

21. **S. Cinti (co-corr. Author)**, V. Mazzaracchio, I. Cacciotti, D. Moscone, F. Arduini. Carbon Black-Modified Electrodes Screen-Printed onto Paper Towel, Waxed Paper and Parafilm M®. Sensors 17 (2017) 2267-2278.

20. **S. Cinti**, G. Volpe, S. Piermarini, E. Delibato, G. Palleschi. Electrochemical biosensors for rapid detection of foodborne Salmonella: a critical overview. Sensors 17 (2017) 1910-1931.

19. **S. Cinti (co-corr. Author)**, B. De Lellis, D. Moscone, F. Arduini. Sustainable Monitoring of Zn(II) in Biological Fluids using Office Paper. Sensors and Actuators B: Chemical 253 (2017) 1199-1206.

18. **S. Cinti (co-corr. Author)**, M. Basso, D. Moscone, F. Arduini. A paper based-nanomodified electrochemical biosensor for ethanol detection in beers. Analytica Chimica Acta 960 (2017) 123-130.

17. F. Arduini, **S. Cinti**, V. Scognamiglio, D. Moscone, G. Palleschi. How cutting-edge technologies impact the design of electrochemical (bio)sensors for environmental analysis. Analytica Chimica Acta 959 (2017) 15-42.

16. **S. Cinti**, F. Arduini. Graphene-based screen-printed electrochemical (bio)sensors and their applications: efforts and criticisms. Biosensors and Bioelectronics 89 (2017) 107-122.

15. **S. Cinti (co-corr. Author)**, C. Minotti, D. Moscone, G. Palleschi, F. Arduini. Fully integrated ready-to-use paper-based electrochemical biosensor to detect nerve agents. Biosensors and Bioelectronics 93 (2017) 46-51.

14. J. Kim, I. Jeerapan, S. Imani, T.N. Cho, A.J. Bandodkar, **S. Cinti**, P.P. Mercier, J. Wang. Non-invasive alcohol monitoring using a wearable tattoo-based iontophoretic-biosensing system. ACS Sensors 1 (2016) 1011-1019.

13. F. Arduini, **S. Cinti**, V. Scognamiglio, D. Moscone. Nanomaterials in electrochemical biosensors for pesticide detection: advances and challenges in food analysis. Microchimica Acta 183 (2016), 2063-

2083.

12. **S. Cinti**, D. Talarico, G. Palleschi, D. Moscone, F. Arduini. Novel reagentless paper-based screen-printed electrochemical sensor to detect phosphate. Analytica Chimica Acta 919 (2016) 78-84.

11. **S. Cinti**, F. Santella, D. Moscone, F. Arduini. $Hg^{2+}$ detection using a disposable and miniaturized screen-printed electrode modified with nanocomposite carbon black and gold nanoparticles. Environmental Science and Pollution Research 23 (2016) 8192-8199.

10. **S. Cinti**, D. Neagu, M. Carbone, I. Cacciotti, D. Moscone, F. Arduini. Novel carbon black-cobalt phthalocyanine nanocomposite as sensing platform to detect organophosphorus pollutants at screen-printed electrode. Electrochimica Acta 188 (2016) 574-581.

9. **S. Cinti**, F. Arduini, D. Moscone, G. Palleschi, L. Gonzalez-Macia, A.J. Killard. Cholesterol biosensor based on inkjet-printed Prussian blue nanoparticle-modified screen-printed electrodes. Sensors and Actuators B: Chemical 221 (2015) 187-190.

8. D. Talarico, **S. Cinti (co-first author)**, F. Arduini, A, Amine, D, Moscone, G. Palleschi. Phosphate detection through cost-effective carbon black nanoparticle-modified screen-printed electrode embedded in a continuous flow system. Environmental Science & Technology 49 (2015) 7934-7939.

7. **S. Cinti**, F. Arduini, M. Carbone, L. Sansone, I. Cacciotti, D. Moscone, G. Palleschi. Screen-printed electrodes modified with carbon nanomaterials: a comparison among carbon black, carbon nanotubes and graphene. Electroanalysis 27 (2015) 2230-2238.

6. **S. Cinti**, G. Valdés-Ramirez, W. Gao, J. Li, G. Palleschi, J. Wang. Microengine-assisted electrochemical measurements at printable sensor strips. Chemical Communications 51 (2015) 8668-8671.

5. F. Arduini, C. Zanardi, **S. Cinti**, F. Terzi, D. Moscone, G. Palleschi, R. Seeber. Effective Electrochemical Sensor Based on Screen-Printed Electrodes Modified with a Nanostructured Carbon Black – Au Nanoparticles Composite. Sensors and Actuators B: Chemical 212 (2015) 536-543.

4. **S. Cinti**, F. Arduini, D. Moscone, G. Palleschi, A.J. Killard. Development of a Hydrogen Peroxide Sensor Based on Screen-Printed Electrodes Modified with Inkjet-Printed Prussian Blue Nanoparticles. Sensors 14 (2014) 14222-14234.

3. **S. Cinti**, F. Arduini, G. Vellucci, I. Cacciotti, F. Nanni, D. Moscone. Carbon Black assisted Tailoring of Prussian Blue Nanoparticles to Tune Sensitivity and Detection Limit towards $H_2O_2$ by using Screen-Printed Electrode. Electrochemistry Communications 47 (2014) 63-66.

2. **S. Cinti**, S. Politi, D. Moscone, G. Palleschi, F. Arduini. Stripping Analysis of As(III) by Means of Screen-Printed Electrodes Modified with Gold Nanoparticles and Carbon Black Nanocomposite. Electroanalysis 26 (2014) 931-939.

1. K. Zelenka, T. Trnka, I. Tišlerová, D. Monti, **S. Cinti**, M. L. Naitana, L. Schiaffino, M. Venanzi, G. Laguzzi, L. Luvidi, G. Mancini, Z. Nováková, O. Šimák, Z. Wimmer, P. Drašar. Spectroscopic, Morphological, and Mechanistic Investigation of the Solvent-Promoted Aggregation of Porphyrins Modified in meso-Positions by Glucosylated Steroids. Chemistry – A European Journal 17 (2011) 13743 -13753.

**Book Chapters**

5. F. Arduini, **S. Cinti**, V. Scognamiglio, D. Moscone. Nanomaterial-based sensors In Handbook of Nanomaterials in Analytical Chemistry Modern - Trends in Analysis. Chapter 13, pp. 329-355, Elsevier, 2020.

4. F. Arduini, V. Scognamiglio, **S. Cinti**, A. Amine, A. Antonacci, J. Vasiljevic, G. Favaretto, D. Moscone, G. Palleschi. Enzyme - Based Materials. In Handbook of Smart Materials in Analytical Chemistry, First Edition. Chapter 6, pp. 179-209, John Wiley & Sons Ltd, 2019

3. **S. Cinti**, V. Scognamiglio, D. Moscone, F. Arduini. Efforts, challenges, and future perspectives of graphene-based (bio)sensors for biomedical applications. In Graphene Bioelectronics. Chapter 6, pp. 133-150, Elsevier, 2018.

2. F. Arduini, **S. Cinti**, V. Scognamiglio, D. Moscone. Paper-Based Electrochemical Devices in Biomedical Field: Recent Advances and Perspectives. In Comprehensive Analytical Chemistry: Past, Present and Future Challenges of Biosensors and Bioanalytical Tools in Analytical Chemistry: A Tribute to Professor Marco Mascini. Chapter 11, Vol. 77, pp. 385-413, Elsevier, 2017.

1. C. Zanardi, L. Pigani, R. Seeber, F. Terzi, F. Arduini, **S. Cinti**, D. Moscone, G. Palleschi. Carbon black/gold nanoparticles composite for efficient amperometric sensors. In Lecture Notes in Electrical Engineering. Chapter 28, pp. 159-163, Springer International Publishing, 2015.

Seminars and Conferences

**Conference Papers**

2. **S. Cinti**, D. Moscone, F. Arduini. Screen-printed electrodes as versatile electrochemical sensors and biosensors. In East-West Design & Test Symposium (EWDTS), 2017 IEEE (pp. 1-4). IEEE.

1. D. Talarico, F. Arduini, **S. Cinti**, A. Amine, D. Moscone, G. Palleschi. Screen-printed electrode modified with the carbon black nanoparticles as a cost-effective and sensitive sensor for phosphate detection. In AISEM Annual Conference, 2015 XVIII, pp. 1-4, IEEE, 2015.

**Invited Seminars**

International

5. **S. Cinti**
Low-Cost Solutions for Developing Portable Analytical Devices, Empowered by Chemometrics. Invited by Prof. Arben Merkoci, ICN2, Barcelona, Spain, 30 Oct 2020

4. **S. Cinti**
Paper-based platforms for clinical applications. Invited by Dr. Jahir Orozco, University of Antioquia, Colombia, 25 Sep 2020

3. **S. Cinti**
Paper-based biosensors: seminar and lab-workshop. Invited by Prof. Anthony J. Killard, University of the West of England, Bristol, UK, 20-21 Feb 2018.

2. **S. Cinti**
Paper makes bioelectrochemistry closer to end-users: reagent-free detection of nerve agents. Invited by Prof. Riccarda Antiochia, 1st International Mini-workshop on Bioelectrochemical Sensing, University of Rome “Sapienza”, Italy, 19 Dec 2017.

1. **S. Cinti**
Paper-based electrochemical sensors for detection of pesticide and phosphate. Invited by Dr. Marja Nissinen, Oulu University of Applied Science, Finland, 16 May 2017.

National

7. **S. Cinti**
Paper-based electroanalysis: fundamentals and application in food (and environmental) matrices. Invited by Prof. Dario Compagnone, Università di Teramo, Facoltà di bioscienze e tecnologie agro-alimentari e ambientali, 15 Nov 2018.

6. **S. Cinti**
“ASSURED” solutions for environmental electroanalysis. Invited by Prof. Davide Vittorio Vione, Università di Torino, Dipartimento di Chimica, 20 Jul 2018.

5. **S. Cinti**

Progetti Marie-Curie individuali: l'esperienza di chi ha scritto e vinto il progetto. Invited by Dr. Federico Bella, Y-RICh Workshop, University of Rome "Sapienza", Italy, 7 Jun 2018.

4. **S. Cinti**
Ricercatori in classe per Fondazione Umberto Veronesi, Secondary school Liceo Scientifico Isacco Newton, Roma, 22 Mar 2018.

3. **S. Cinti**
The role of paper as smart material applied to environmental electroanalysis. Invited by Prof. Luigi Falciola, Department of Chemistry, University of Milan, Italy, 28 Apr 2017.

2. **S. Cinti**
Ricercatori in classe per Fondazione Umberto Veronesi, Secondary school ITIS Giovanni Giorgi, Roma, 1 Mar 2017.

1. **S. Cinti**
Inkjet-printer protocol optimization and experimental setup. Invited by Prof. Patrizia R. Mussini, SmarMatLab, Department of Chemistry, University of Milan, Italy, 5 Jun 2014.

**Conferences and Congresses**
International

10. **S. Cinti**
Paper-based biosensors: all the experimental meanings of "paper" (Invited, oral presentation), International Webinar on Biosensors and Bioelectronics, 28-30 Oct 2020.

9. **S. Cinti**
Tips for young researchers (oral presentation), The Ninth International Workshop on Biosensors, Merzouga, Morocco, Oct 9-11, 2019.

8. N. Bagheri, **S. Cinti**, R. Massoud, D. Moscone, F. Arduini
A 96-well wax printed Prussian Blue paper for the visual determination of cholinesterase activity in serum (oral presentation), European Biosensor Symposium 2019, Florence, Italy, Feb 18-21, 2019.

7. **S. Cinti**, F. Arduini, D. Moscone
A Lab-on-a-tip approach to make electroanalysis user-friendly and de-centralized (poster presentation), Swiss Symposium in Point-of-Care Diagnostics, Chur, Switzerland, 18 Oct 2018.

6. **S. Cinti**, F. Arduini, D. Moscone, G. Palleschi
Using paper as scaffold for nanoparticles synthesis: Prussian blue and blood glucose biosensing (poster presentation), 7th EuCheMS Chemistry Congress, Liverpool, England, 26-30 Aug 2018.

5. **S. Cinti**, R. Cusenza, D. Moscone, G. Palleschi, F. Arduini
Paper as reactor for nanoparticles synthesis: "Paper blue" and application for diabetes healthcare (oral presentation), Biosensors 2018, Miami, USA 12-15 Jun 2018.

4. **S. Cinti**, D. Moscone, F. Arduini
Screen-printed electrodes as versatile electrochemical sensors and biosensors (oral presentation), 15th IEEE East-West Design & Test Symposium (EWDTS-2017), Novi Sad, Serbia, 29 Sep - 2 Oct 2017.

3. **S. Cinti**, F. Arduini, Z. Zahid, G. Palleschi, D. Moscone
Fully integrated ready-to-use paper-based electrochemical biosensor to detect nerve agents (oral presentation), Biosensors 2016, Gothenburg, Sweden, 25-27 May 2016.

2. **S. Cinti**
Prussian Blue: "artificial peroxidase" to detect H2O2 (oral presentation), 2nd Workshop on biosensors for water monitoring, Università di Roma Tor Vergata, 8-10 Apr 2015.

1. **S. Cinti**, F. Arduini, G. Palleschi, D. Moscone, A.J. Killard
Amperometric detection of hydrogen peroxide at Prussian blue nanoparticle-modified electrodes (poster presentation), Electrochem 2013, Southampton, UK, 1-3 Sep 2013.

National

16. **S. Cinti**
Signal ON and Signal OFF Paper-Based Electroanalytical Strips for Nucleic Acids Detection: Breast Cancer as Case of Study (oral presentation), Workshop:Towards Novel Anticancer Strategies: It's Time to Build a New Research Community, Napoli, Nov 18, 2019

15. **S. Cinti**
Paper: a novel multi-tasking resource in analytical chemistry (oral presentation), XXVIII Congresso Nazionale della Divisione di Chimica Analitica, Bari, Sep 22-26, 2019.

14. **S. Cinti**, N. Colozza, I. Cacciotti, D. Moscone, M. Polomoshnov, E. Sowade, R.R. Baumann, F. Arduini
Paper-based printed electronics: inkjet-printed nanomodified sensor for ascorbic acid detection (oral presentation), Bioanalitica 2018, Bologna, Italia, 21 Sep 2018.

13. **S. Cinti**, F. Arduini, D. Moscone, G. Palleschi
All-in-paper (blue): synthesis, matrix purification, reagent-free detection. Blood glucose as case of study (oral presentation), XXVII Congresso della Divisione di Chimica Analitica, Bologna, Italia, 16-20 Sep 2018.

12. **S. Cinti**, F. Arduini, D. Moscone, G. Palleschi
Paper-based electrochemical tools for sweat analysis electronalysis (oral presentation), Giornate dell'Elettrochimica Italiana 2018 – winter edition, Sestriere (To), Italia, 21-25 Jan 2018.

11. **S. Cinti**, F. Arduini, D. Moscone, G. Palleschi
Sustainable electronalysis: paper-based (bio)sensors in clinical field (oral presentation),17th Merck Young Chemists Symposium, Milano Marittima, 13-15 Nov 2017.

10. **S. Cinti**, L. Fiore, R. Massoud, C. Cortese, D. Moscone, G. Palleschi, F. Arduini
Reagentless paper-based screen-printed device to detect chloride ions in serum and sweat (oral presentation), XXVI Congresso Nazionale SCI, Paestum, 10-14 Sep 2017.

9. **S. Cinti**, F. Arduini, G. Palleschi, D. Moscone
Paper as substrate in bioelectroanalysis for healthcare applications (keynote), Giornate di Chimica Analitica in memoria del Prof. Francesco Dondi, Ferrara, 10-11 Jul 2017.

8. **S. Cinti**
Nano/micromaterial-driven electroanalysis enhancement: facile approaches to improve (bio)sensing (oral presentation), Giornate dell'Elettrochimica Italiana 2016, Gargnano (Bs), 11-14 Sep 2016.

7. **S. Cinti**, F. Arduini, G. Palleschi, D. Moscone
A paper based-nanomodified electrochemical biosensor for ethanol detection in beers (oral presentation), Bioanalitica 2016 "Chimica bioanalitica e nanotecnologie", Bologna, 4 Jul 2016.

6. **S. Cinti**, M. Basso, F. Arduini, G. Palleschi, D. Moscone
Paper as substrate for screen-printed electrodes (poster presentation), Terzo Convegno Nazionale Sensori, Roma, 23-25 Feb 2016.

5. **S. Cinti**, D. Talarico, F. Arduini, G. Palleschi, D. Moscone
All-in-paper electrochemical sensor to detect phosphates (oral presentation), XXV Congresso Nazionale della Società Chimica Italiana, Divisione di Chimica Analitica, Trieste, 13-17 Sep 2015.

4. **S. Cinti**, G. Valdés-Ramírez, W. Gao, J. Li, G. Palleschi, J. Wang
Enzyme-free Janus particles accelerated degradation and detection of organophosphorous nerve

agents using SPE: a proof of concept approach (oral presentation), GS 2015 - Sensori e biosensori: stato dell'arte e nuove prospettive, Parma, 15-17 Jun 2015.

3. D. Talarico, F. Arduini, **S. Cinti**, A. Amine, D. Moscone, G. Palleschi
Cost-effective and sensitive sensor for phosphate detection by screen-printed electrodes modified with carbon black nanoparticles (poster presentation), XXVIII AISEM Annual Conference, Fondazione Bruno Kessler, Trento, 3-5 Feb 2015.

2. **S. Cinti**, F. Arduini, G. Palleschi, D. Moscone, A.J. Killard
Cholesterol bioassay by-means of microfluidic device based on prussian blue nanoparticles modified screen-printed electrodes (poster presentation), XXIV Congresso Nazionale della Società Chimica Italiana, Divisione di Chimica Analitica, Arcavacata di Rende (CS), 7-12 Sep 2014.

1. **S. Cinti**, F. Arduini, G. Palleschi, D. Moscone, A.J. Killard
Development of hydrogen peroxide sensor based on screen-printed electrode modified with inkjet printed prussian blue nanoparticles (oral presentation), II Convegno Nazionale Sensori, Roma, 19-21 Feb 2014.

## ORGANIZATION SKILLS

13-14/10/2020 **AMYC-BIOMED 2020**
Virtual conference: Chair of the Autumn Meeting for Young Chemists in the Biomedical Sciences 2020. Organized with the sponsorship of Excellence Dept. of Pharmacy Uni. of Naples "Federico II", Italian Chemical Society, Elsevier, Fondazione Umberto Veronesi, ChemistryViews.org.

04/2020 **1000xChemistry 2020 – CoViD Ed.**
Contest: Writing competition on scientific, didactic and organizational subjects at the time of CoViD-19. Organized by the board of the Interdivisional Group of the Diffusion of Chemical Culture of the Italian Chemical Society in collaboration with ChemistryViews.org (Wiley).

25-27/11/2019 **Merck young chemists' symposium 2019**, Rimini
Congress: Organized by the board of the Young Group of the Italian Chemical Society.

24-25/11/2019 **SCI*C: Scuola in Comunicazione della Chimica,** Rimini
School: Organized by the board of the Interdivisional Group for the Dissemination of Chemical Culture of the Italian Chemical Society.

21-24/11/2019 **Futuro Remoto 2019**, Città della Scienza, Napoli
Exhibition: Essere 4.0 – Storie di rivoluzioni, scienza e tecnologia, da Leonardo da Vinci ad oggi.
Laboratory: L'essere 4.0 in 4 parole: miniaturizzazione, semplicita', diagnostica, sostenibilita'.

18/10/2019 **Atelier della Salute 2019**, Napoli
Workshop interactive: Organized by Depr. of Pharmacy members.

27/05/2019 **Y-RICh 2019,** Roma
Workshop: Dedicated to research projects for young chemists, organized by the board of the Young Group of the Italian Chemical Society .

05/2019 **ChiMiCapisce 2019**
Contest: Communication and dissemination competition for the chemical sciences. Organized by the directors of the Young Groups and the Dissemination of the Chemical Culture of the Italian Chemical Society.

03/2019 **1000xChemistry 2019**
Contest: Writing competition on Chemistry research/topics, Organized by the board of the Interdivisional Group of the Diffusion of Chemical Culture of the Italian Chemical Society in collaboration with ChemistryViews.org (Wiley).

24-31/10/2018 **Festival della Scienza di Genova 2018**
Laboratory: "CIAK: (re)AZIONE!", organized by Interdivisional Group of the Diffusion of Chemical Culture of the Italian Chemical Society

06/2018 **ChiMiCapisce 2018**
Contest: Communication and dissemination competition for the chemical sciences. Organized by the directors of the Young Groups and the Dissemination of the Chemical Culture of the Italian Chemical Society.

## COMMUNICATION SKILLS

07/2020 - Now TV Author of "Scienza dietro l'Eccellenza" Show
Cusano Italia TV, Channel 264 DTT or YouTube streaming
(https://www.youtube.com/channel/UCp8ozUUj3eAb2oHk1FUOnyQ)
In this TV show I select an excellent food product of Italy and I discuss the scientific, storic and nutritive features. In addition, the presence of a Chef helps to cook a dish with the chosen food product.

06/2016 - Now Editor of a blog for scientific dissemination aimed at non-specialized users.
The section I take care of is called "Scienza Quotidiana" sulla testata online "Abitare a Roma"
http://www.abitarearoma.net/argomenti/scienza-quotidiana/
Description: In this section, taken in popular language, phenomena that each of us can observe, perhaps without asking questions, in the kitchen, at home, in daily operations.

01/2017 - 06/2018 Guest in two broadcasts
Radio Cusano Campus 89.1 FM.
http://www.tag24.it/
-Etica ed Etichetta (Monday from 3 to 5 pm ) directed by Livia Ventimiglia.
Description: The labels of commercial products are read, ranging from sun creams to toothpastes, from fertilizers to cooking oil. The listener receives an explanation of what are the components of the most used products, with an explanation regarding their properties.
-Cultura e Cucina (Saturday from 1 to 2 pm) directed by Matteo Torrioli e Livia Ventimiglia.
Description: In this space a food, a drink, etc. is taken into consideration and around this a story is developed, providing the listener with a 360 ° view of this product.

01/2017 - 09/2017 Writing articles about the relationship between chemistry and society.
Magazine is "Unicusano Focus Sport & Ricerca"
http://www.tag24.it/
Description: In these articles I try to explain to the reader what the role of chemistry is in society: whether it be attacks, sports or cinema.

## PERSONAL COMPETENCES

Mother Tongue: Italian

| Other | COMPREHENSION | | SPOKEN | | WRITTEN |
|---|---|---|---|---|---|
| | Listening | Reading | Interaction | Oral production | |
| English | C1 | C1 | C1 | C1 | C1 |

Other competences: 5-a-side football player and coach. Art, reading and dissemination are among the passions that occupy my free time .

## ULTERIORI INFORMAZIONI

Dati personali ***Autorizzo il trattamento dei miei dati personali presenti nel cv ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali" e dell'art. 13 del GDPR (Regolamento UE 2016/679)".***