



### Synopsis of Publications

✦ Research articles: **19**    ✦ Review articles: **06**  
 ✦ Books chapters: **04**  
 ✦ Poster Presentations: **08**    ✦ Oral Presentations: **09**

### LANGUAGE PROFICIENCY

French, 1<sup>st</sup> language: Native  
 English, 2<sup>nd</sup> language: Scientific knowledge  
 German, 3<sup>rd</sup> language: Basic knowledge

### SOFTWARE, DATABASE, and tools

- MassLynx, MassHunter, Chromeleon, Origin, Chemdraw, Compass-Hystar, ACD-Lab  
 - MZmine, SIRIUS, MS Dial, XCMS, GNPS  
 - EC-Lab, GPES, PSTrace, NOVA, Dialogue  
 - Microsoft Office, SciFinder, Scopus, Web of Science  
 - AI tools : ChatGPT, Gemini, Claude, Le Chat-Mistral, DeepSeekK, Scispace, Perplexity, etc.

### COMPETENCES

#### Technical skills:

- Mass spectrometry (Q-TOF, QqQ, SQ), liquid chromatography (analytical and preparative), UV-Vis, FTIR  
 - Electrochemistry (EC): Voltammetry, coulometry, amperometry, impedance spectroscopy

#### Scientific skills:

- Simulation and prediction of environmental degradation pathways using electrochemistry-mass spectrometry  
 - Development of modified electrodes for direct/indirect and selective detection of electroactive organic compounds  
 - Development and validation of LC-MS methods (targeted and untargeted analysis)

#### Transversal skills:

- Organization of seminars, workshops, and training sessions  
 - Strong bibliographic and critical research abilities  
 - Driving license (Categories A and B)

### CERTIFICATIONS

**2026:** Artificial Intelligence for all (LinkedIn Learning)  
**2025:** Essential Grant Writing Skills Programme (Africa Research Excellence Fund - AREF)  
**2025:** Project Management (University of Lille, France)  
**2025:** Writing and publishing a scientific article (France Université Numérique - University of Lille, France)

### VOLUNTEERING & RESPONSABILITIES

**2025:** Volunteer, PhDOOC Association: Involved in MOOC-related activities and communication tasks. **Based in France**  
**2025:** Mentor, young researchers in the Youth Club of the French Society of Mass Spectrometry (CJSM). **France**  
**2024:** Founder & CEO, RCTT Group (Research – Consulting – Training – Transformation)  
**2024:** Co-Founder & Vice President, **in Science** Association  
**2023 - to date:** Certified Scholarship Ambassador-Mentor, **Africademics. Based in South Africa**  
**2017:** Supervisor of a youth information and awareness campaign organized by the NGO **Positive Youth**, Dschang, Cameroon

### HOBBIES

Scientific and cultural debates, team sports (football, volleyball, tennis), classical dance, music, and reading

## Ranil Clément TONLEU TEMGOUA, PhD

### Analytical Chemist (Electroanalysis – Mass Spectrometry)

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**Hamburg, Germany**

**Mobility: Africa / Europe / Canada / USA**

**Cameroonian, born on February 09, 1989, Nkongsamba, Cameroon**

### -----Current Positions-----

**Research Associate:** Helmholtz Center Hereon & University of the Federal Armed Forces, Hamburg, Germany. (Since December 2025)

----- **External Research Advisor-Analytical Electrochemistry** (January 2022 – to date): Research Unit of Noxious Chemistry and Environmental Engineering (RUNOCHEE), University of Dschang, Dschang, Cameroon.

----- **External Consultant in Analytical Chemistry-Mass Spectrometry** (January 2024 – to date): YaBiNaPA SDG Graduate School, University of Yaounde I, Yaounde, Cameroon.

### Research Experiences

----- **Visiting Fellowship | Lab4You Fellow** (October 2025 – November 2025). Shimadzu Europa GmbH, Duisburg, Germany - **02 months** (<https://www.shimadzu.eu/about/research-development/lab4you.html>)

**Research topic:** HR-LC-MS/MS-based profiling of pesticide transformation products generated under electrochemical reduction

----- **Postdoctoral Researcher | Humboldt Fellow** (October 2023 – September 2025): BAM Federal Institute for Materials Research and Testing. Department of Analytical Chemistry and Reference Materials - Organic Trace Analysis and Food Analysis, **Berlin, Germany - 24 months**  
**Research topic:** Electrochemistry & Environmental Applications - Exploring electrochemical degradation pathways of pollutants using LC-MS

----- **Head of Analytical Chemistry Laboratory | YaBiNaPA DAAD** (June 2021 – June 2023): Yaounde-Bielefeld Graduate School. HTTC, University of Yaounde I, Yaounde, Cameroon & Bielefeld University, Bielefeld - **Germany - 24 months**

**Research topic:** Development and validation of LC-MS methods - Targeted and untargeted LC-MS/MS analysis - Quality control – quantification by LC-MS methods.

----- **Visiting Fellowship | Coimbra Group Fellow** (February 19 – April 19, 2023). Department of Analytical Chemistry, University of Granada, **Granada, Spain- 02 months**

**Research topic:** LC-MS/MS data processing tools: MZmine, SIRIUS, MSConverter, GNPS.

----- **Postdoctoral Researcher | CEISAM Grant** (January 2021 – June 2021): CEISAM Laboratory –Nantes, France - **05 months**

**Research topic:** Click-electrochemical reactions - High-resolution mass spectrometry.

----- **PhD Student in Charge of a Research Project | SCAC France Fellow: CEISAM-Nantes, France – 4 years (2016 – 2020)**

**Title:** Simulation of the environmental degradation of selected electroactive pesticides through coupling of electrochemistry - high resolution mass spectrometry - DFT theoretical calculations. (Reference: <https://www.theses.fr/2020NANT4079#>).

----- **Master Student in Charge of a Research Project: RUNOCHEE - University of Dschang, Cameroon– 18 months (2012 – 2013)**

**Title:** Electrochemical determination of carbendazim (pesticide) by differential pulse voltammetry using a Ni<sub>2</sub>Al(OH)<sub>6</sub> layered double hydroxide modified carbon paste electrode.

### Academic Qualifications

✎ **PhD in Analytical Chemistry (Electroanalysis – Mass Spectrometry) (First class honours with congratulations of the jury): 2020.** University of Nantes, Nantes, France & University of Dschang, Dschang, Cameroon

✎ **Master of Science in Analytical Chemistry, Electroanalysis (grade: Good; 14.28/20): 2013.** University of Dschang, Dschang, Cameroon, RUNOCHEE

✎ **Bachelor's degree in Inorganic Chemistry (grade: Fairly Good; 13.10/20): 2011.** University of Dschang, Dschang, Cameroon

✎ **Master's 1 in Soil Science – Faculty of Agronomy and Agricultural Sciences, University of Dschang (Unfinished): 2016**

### Teaching Experiences

📖 **Part-time teacher – YaBiNaPA-Yaoundé-Bielefeld Graduate School (HTTC – University of Yaoundé): 2022 – 2023 (2 years).**

📖 **Part-time teacher – Institut Supérieure de Chimie et de Gestion - Higher Institute of Chemistry and Management (HICM – Yaoundé): 2021 – 2023 (3 years).**

📖 **Part-time teacher – University of Dschang: 2014 – 2019 (5 years). Tutorials & Practicals: Level 1, Level 2, Level 3, and Master I.**

## Scientific Conferences/Congresses

- August 2025:** 1<sup>st</sup> **Conference on Materials and Applications in Cameroon (CMAC<sup>1</sup>)**, jointly organized by the University of Dschang (Cameroon) and Heinrich Heine University of Düsseldorf (Germany). Scientific Committee Member, online participation. <https://cmac1.sciencesconf.org/>
- May 2025:** 247<sup>th</sup> **ECS Meeting (The Electrochemical Society)**, The Electrochemical Society, Montreal, **Canada** (oral communication).
- April 2025:** 29<sup>th</sup> **RCJSM (Rencontres Club Jeunes de Spectrométrie de Masse, Young Researchers' Meeting on Mass Spectrometry)**, the French Society of Mass Spectrometry, Toulouse, **France** (oral communication).
- March 2025:** 56<sup>th</sup> **annual conference of the DGMS, German Society of Mass Spectrometry**, at the University of Göttingen, Göttingen, **Germany** (poster communication).
- September 2025:** **Adlershofer Kolloquium Analytik (Adlershof Colloquium on Analytics)**, Federal Institute for Materials Research and Testing (BAM), Berlin, **Germany** (oral communication). **Invited.**
- August 2024:** 12<sup>th</sup> **edition of the Analytical Chemistry Days**, "Groupe Camerounais de Chimie Analytique, GC<sup>2</sup>A" at the University of Dschang, Dschang, **Cameroon**. **Scientific Plenary Conference (Guest lecture) & Scientific Committee Member. Invited.**
- July 2024:** "Les Journées d'Électrochimie" **The Electrochemistry Days**, Electrochemistry subdivision of the "Société Chimique de France", Saint-Malo (Côte d'Emeraude, Brittany), at the Palais du Grand Large, **France** (poster communication).
- May 2024:** 36<sup>th</sup> **Topical Meeting of the International Society of Electrochemistry (ISE)**, Šibenik, **Croatia** (poster communication).
- February 2024:** 34<sup>th</sup> **Mass Spectrometry Forum**, Austrian Society of Analytical Chemistry (ASAC) at the University of Vienna, Vienna, **Austria** (poster communication).
- February 2023:** 4<sup>th</sup> **Network Meeting on Natural Plants Chemistry**, YaBiNaPA SDG Graduate School & the University of Bielefeld (Germany), University of Yaounde 1, **Cameroon** (Organizing committee - Secretariat).
- August 2022 & September 2019:** 11<sup>th</sup> & 10<sup>th</sup> **edition of the Analytical Chemistry Days**, "Groupe Camerounais de Chimie Analytique, GC<sup>2</sup>A" at the University of Yaounde 1, Yaoundé, **Cameroon**. Oral communication (2019). Member of Jury (2022).
- September 2021:** **Master's and Doctoral seminar on Natural Plants Chemistry**, YaBiNaPA SDG Graduate School & the Laboratory of Chemistry, University of Douala, **Cameroon** (Organizing committee - Secretariat).
- June 2021:** **French Days of Mass Spectrometry**, French Society of Mass Spectrometry, Online from June 14 to 24 (Participant).
- May 2021:** **ElcheMS 2021, 6th International Workshop on Electrochemistry/Mass Spectrometry**, Karst Research Group, at the University of Münster, Münster, **Germany** (oral communication).
- February 2019:** **Doctoral School Day – Matter, Molecules and Materials (DSD-3M)**, Faculty of Sciences & Techniques of the "Université Bretagne Occidentale", Brest, **France** (oral communication).
- August 2018 & August 2014:** Participation in the 6<sup>th</sup> **Life Science conference**, Cameroon Forum for Biological Science (CAFOBIOS) at the University of Dschang, Dschang, **Cameroon** (2018-oral communication; 2014-Participant).
- June 2018:** **Doctoral School Day – Matter, Molecules and Materials (DSD-3M)**, Faculty of Sciences & Techniques of the University of Le Mans, Le Mans, **France** (poster communication).
- May 2018:** 8<sup>th</sup> **International Conference on Electrochemistry in Nanoscience-ElecNano<sup>8</sup>**, Electrochemistry subdivision of the "Société Chimique de France (SCF)" at the University of Nancy, Nancy, **France** (poster communication).
- May 2015:** 4<sup>th</sup> **Conference of Toxicological Sciences**, Cameroon Society for Toxicological Sciences at Djeuga Palace Hotel, Yaoundé, **Cameroon** (oral communication).
- October 2015 & October 2013:** 8<sup>th</sup> & 7<sup>th</sup> **edition of the Analytical Chemistry Days**, "Groupe Camerounais de Chimie Analytique, GC<sup>2</sup>A" at: University of Douala, 2015, **Cameroon** (oral and poster communication); University of Dschang, 2013, **Cameroon** (participant and member of organizing committee).

## Scientific Workshops/Training and Seminars

- February 2025:** **MOOC, PhD and Career Development**. By PhDOOC Association, **France**, online participation.
- December 2024:** **MOOC, Organic Electrochemistry Short Course**. By Shannon Stahl (University of Wisconsin-Madison) & Mohammad Rafiee (University of Missouri-Kansas City), **USA**, online participation.
- February 2024:** **MOOC, Revolutionize your research: The best AI tools to make your research easier and faster** (participant). By Dr. Christophe COUSI, Trainer in research methodology, University of Toulouse, **France**, online participation.
- May 2023:** **MOOC, Introduction to Assessment and Management of Chemicals** (participant). By Dr. Marlene Ågerstrand, Department of Environmental Science, Stockholm University, **Sweden**, online participation.
- February 2023 (05 days):** **Quantification of active pharmaceutical ingredients by HPLC-UV and LC-MS**, at the University of Yaoundé 1, **Cameroon** (participant). By Dr. Olivier HEUDI, Laboratory Head DMPK at Novartis Pharma AG, **Switzerland**, in person.
- January 2023 (05 days):** **LC-MS/MS - A hands-on approach**, organized by the RORO (Recycling Organization for Research Opportunities), at the University of Yaoundé 1, **Cameroon** (participant). By Dr. Giles Edwards, University of Manchester, **England**, in person.
- December 2022 (05 days):** **Workshop on "High Performance Liquid Chromatography (HPLC) and the in vitro Antimicrobial and Cytotoxicity Assessment of Natural"**, organized by the Humboldt Research Hub-CECANAPROF, Higher Teacher Training College, University of Yaoundé 1, **Cameroon** (Trainer on HPLC), in person.
- September 2021 (03 days):** **Training on instrumentations and method development on Semi-preparative HPLC U3000**, organized by Bouattour Equipements & Services, Thermo Scientific, at the University of Yaoundé 1, **Cameroon** (participant). By Ing. Mohamed BEN SAID, **Tunisia**, in person.
- April 2019 (01 day):** Participation in the scientific workshop on "Effective scientific project and manuscript writing, Understanding the manuscript publishing process", organized by the Cameroon Forum for Biological Sciences (CAFOBIOS) at Tockem-Bafou, **Cameroon** (participant), in person.
- April 2018 (03 days):** Participation in the « **Doctoriales Bretagne Loire** », on the topic « Doctors, actors of innovation », organized by the "Université Bretagne Loire" and the University of Angers, Angers, **France**, in person.
- December 2017 (03 days):** Participation in the course entitled "An introduction to liquid chromatography and mass spectrometry for chemists and biochemists", by Professor Kym Francis FAULL (Los Angeles, USA), at the Congo Basin Institute, Nkolbisson, Yaoundé, **Cameroon** (participant), in person.
- October 2017 (01 day):** Participation in the scientific workshop on "bioethics, research funding and effective scientific communication", organized by the Cameroon Forum for Biological Sciences (CAFOBIOS) at the "Monastère St Benoit de Babété", Mbouda, **Cameroon** (participant), in person.

## **Dr. Ranil Clément TONLEU TEMGOUA, PhD - Analytical Chemist (Electroanalysis – Mass Spectrometry)**

### **Fellowships/Scholarships, Internship, and Prizes - Awards**

**2025: Magnitude Award for Best Talk at the 247th ECS Meeting** – Montreal, Canada, by ECS – The Electrochemical Society. \$150

**2025: Coimbra Group Fellowship - Scientific Visit**, Charles University, Prague, Czech Republic- **01 month. €1,200**

**2024: Lab4you Winner- Internship**, Shimadzu Laboratory World, Shimadzu Europa GmbH, Duisburg, Germany - **02 months.**

**2024: Young Researcher Award in Analytical Chemistry – Electrochemistry**, by the Cameroonian Group of Analytical Chemistry (CGAC). **XOF 100,000**

**2023: Humboldt Research Fellowship - Postdoc**, BAM Federal Institute for Materials Research and Testing, Berlin, Germany - **24 months. k€120**

**2023: Coimbra Group Fellowship - Scientific Visit**, Department of Analytical Chemistry, University of Granada, Spain - **02 months. €2,200**

**2021: YaBiNaPA DAAD - Fixed-term contract**, University of Yaounde I - Cameroon & Bielefeld University - Germany - **24 months. k€18**

**2021: CEISAM Laboratory Grant - Postdoc**, short-term Internship in the CEISAM Laboratory, University of Nantes, France - **05 months. k€10**

**2016-2019: SCAC France Fellowship - Postgraduate (French Government**, Service de Cooperation et d'Action Culturelle) of the French Embassy in Cameroon. Exchange short-term Internship (4 months + 6 months + 4 months) in the CEISAM Laboratory, University of Nantes, France - **14 months. k€18**

**April 2018: Participation in the « Doctoriales Bretagne Loire », on the topic « Doctors, actors of innovation », organized by the "Université Bretagne Loire" and the University of Angers, Angers, France. 3<sup>rd</sup> prize, winner of the public prize (Theme: "Eco-Touille").**

**2011-2020: National awards bestowed by the Head of State recognizing the top-performing students at Universities in Cameroon. XOF 450,000**

### **Hyperlinks to Researcher and Professional accounts**

\* **Research ID – Web of Science:** <https://www.webofscience.com/wos/author/record/2270605>

\* **Research Gate:** <https://www.researchgate.net/profile/Ranil-Tonleu-Temgoua>

\* **Google Scholar:** <https://scholar.google.com/citations?user=oi6yTwUAAAAAJ&hl=fr&oi=ao>

\* **LinkedIn:** <https://www.linkedin.com/in/ranil-cl%C3%A9ment-tonleu-temgoua-phd-49aa16b8/>

\* **ORCID:** <https://orcid.org/my-orcid?orcid=0000-0003-1876-2962>

### **Membership in Scientific Networks and Professional Learned/Societies - Reviewer**

**2025 :** Member of the **Francophone International Network on Science Advice** (RFICS, Réseau Francophone International sur le Conseil Scientifique)

**2024 - to date:** Member of the **Royal Society of Chemistry (RSC)**

**2024 - to date:** Member of the **International Society of Electrochemistry (ISE)**

**2024 - to date:** Member of the **German Humboldt Network**, "Deutsches Humboldt-Netzwerk e.V."

**2023 - to date:** Member of the **German Society for Mass Spectrometry**, "Deutschen Gesellschaft für Massenspektrometrie" (DGMS)

**2023 - to date:** Member of the **International Younger Chemists Network (IYCN)**

**2023 - to date:** Member of the **African Union Network of Sciences (AUNS)**

**2023 - to date:** Member of the **A.De.I.B.A Association**, "Association for the Development of Innovation for the Bioeconomy in Africa "

**2021 - to date:** Member of the **France Alumni - Cameroon**

**2021- to date:** Member of the **American Chemical Society (ACS) - Premium**

**2021- to date:** Reviewer at the **Royal Society of Chemistry (RSC), Springer Nature, Elsevier, Wiley, Bentham Science Publishers**

**2021 - to date:** Member of the **French Society of Mass Spectrometry**, "Société Française de Spectrométrie de Masse" (SFSM)

**2015 - to date:** Member of the **Cameroonian Analytical Chemistry Group**, "Groupe Camerounais de Chimie Analytique" (GC<sup>2</sup>A)

**2014 - 2015:** Member of the **Cameroon Forum for Biological Sciences (CAFOBIOS)**

### **Referees**

**Pr. Dr. EBINGHAUS Ralf**, Director, Institute of Coastal Environmental Chemistry, Helmholtz–Center Hereon, Geesthacht - Hambourg, Germany. Tel/Mobile: +49 (0)4152 87-2354; E-mail: [ralf.ebinghaus@hereon.de](mailto:ralf.ebinghaus@hereon.de)

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I declare on my honour that the information provided above is accurate.

**Hamburg, 05.04.2026**

**Ranil Clément TONLEU TEMGOUA, PhD**