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SUMMARY

Analytical/ Research and Development Chemist with 10 years in QC/QA. An innovator in environmental science and drug delivery. Develops solutions for clean water, healthcare, and green technologies. A published researcher and collaborator, advancing scientific knowledge.

PROFESSIONAL EXPERIENCE

Chemistry Teacher/Laboratory Assistant
Academics Ltd, Stoke-on-Trent, United Kingdom | 2023 – Present

- Taught Chemistry and conducted Chemistry laboratory experiments (gravimetric, spectroscopic, and chromatographic) for 20+ students and monitored laboratory processes and activities.
- Collaborated with cross-functional teams to troubleshoot and resolve method and instrument issues, ensuring minimal downtime and increased maximum efficiency by 45%.
- Enhanced laboratory safety protocols by applying GLP and drove continuous improvement by liaising with other science departments.
- Designed an in-lab waste reduction scheme effected by process optimization which resulted in 20% waste reduction.

Part-Time: Analytical / Research and Development Chemist
Kinetic Biosciences Ltd: (Neofit Cosmetic Brand), United Kingdom | 2023 – Present

- Formulated novel topical formulations in the form of gels, emulsions, creams, and lotions.
- Increased product quality by 25%, boosted client trust, and secured 10% repeat business growth through in-depth material analysis.
- Improved analytical processes and conducted diverse analyses with UV-visible, LC-MS, FTIR, HPLC, SEM,
- TEM and Image J on raw materials and finished goods.
- Developed new LC-MS and HPLC protocols, and statistical methods for evaluating amino acids and other active ingredients, enhancing product development.
- Created cost-effective formulations by 25% using matrix analysis and advanced Excel tools, minimizing waste.
- Carried out data management on LIMS, leading to a 40% increase in data quality and accessibility.
- Enhanced laboratory productivity by over 80% through method development, validation, and optimization.
- Achieved zero non-conformances, improved data quality by 25%, and optimized active ingredient detection by 50% via LC-MS method development

MRes. Pharmaceutical Analysis
Nottingham Trent University, United Kingdom | 2023 – 2024

Developed Novel Cosmetic Formulations
- Pioneered topical delivery systems through collaborative research, designing and developing new methods for formulating cosmetic products (gels and emulsions).

- Formulated novel topical gels and nanoemulsions with diverse active ingredients (amino acids and plant extracts) for muscle protein synthesis and anti-inflammatory benefits.

Analyzed Pharmaceutical Formulations
- Employed analytical techniques (LC-MS, NMR, ICP-MS, UV-Vis, FTIR) to thoroughly analyze raw materials, intermediates, and finished products, ensuring quality and regulatory compliance.
- Played a pivotal role in developing and validating new analytical methods documented as SOPs, boosting lab productivity by 80% for consistent, reliable execution.
- Optimized existing LC-MS methods, achieving a 50% reduction in detection limits for key ingredients, leading to faster and more accurate analysis.
- Implemented continuous improvement processes in QA/QC, reducing out-of-specification results by 50%. identifying and eliminating sources of error, ensuring consistent product quality.
- Developed new analytical and statistical methods for in-vitro evaluation of topical products, demonstrating a commitment to scientific innovation.

Delivered Quantifiable Results
- Achieved a 25% quality increase in topical formulations through in-depth analysis and profiling of raw materials and active ingredients leading to collaborative research with cosmetic industries.

Data-Driven Decision Making
- Collaborated with cross-functional teams to evaluate the cytotoxicity and validate the optimum concentration levels of the 2 active ingredients on skin cells.
- Performed transdermal absorption evaluation of active ingredients and developed analytical and statistical methods for the *in-vitro* evaluation of 5 amino acids in samples.
- Enhanced data management on LIMS, leading to a 40% improvement in data quality and accessibility for better decision-making.

Analytical Chemist
University of Hull, United Kingdom | 2019
- Developed green methods for metal analysis resulting in a 50% decrease in analysis time and enhanced detection.
- Strategized and led a lean laboratory initiative, increasing throughput by 50%.
- Supported the method validation and quality control team and conducted various analytical tests to validate elemental analysis by microfluidic method.

Research Officer
Rubber Research Institute of Nigeria, Nigeria | 2014 – present (On Leave)

Expanding the Scope of Natural Rubber Resources
- Investigated Gum Arabic, Jatropha plants, and rubber seed oil as potential sustainable latex sources.
- Researched ways to prepare natural materials for industrial use.

Innovation in Topical Drug Delivery Systems with Natural Ingredients
- Created effective creams and lotions using rubber seed oil for moisturizing benefits.
- Increased active ingredient delivery by 20% and improved hydration compared to existing products.
- Developed successful topical treatments for moisturizing and wound healing (90-95% success) using chitosan and Jatropha extracts.

Quality Control Expertise
- Maintained 100% compliance for 10 years through meticulous raw material analysis.
- Led a QC team that enhanced product stability tracking by 30%.

Operational Efficiency and Sustainability
- Increased lab efficiency by 15% through improved procedures and adherence to protocol.
- Developed eco-friendly methods that cut industrial water treatment costs by 50%.
- Elevated compliance by regularly updating SOPs and protocols, managing COSHH forms, and enforcing 5S and GLP principles.

Scientific Communication and Data Management
- Ensured accurate and reliable data through meticulous record-keeping.
- Improved methods for presenting research findings effectively.
- Collaborated with the research team to standardize data entry on LIMS resulting in 100% data accuracy.

Environmental Analytical Chemistry Expertise
- Carried out chemical analysis and developed environmentally friendly water treatment techniques and management products.
- Carried out microscopic, spectroscopic, and chromatographic analysis of plant extracts and biomaterials.
- Conducted research on utilizing natural materials for value-chain addition.

Effective Communication and Leadership
- Effectively presented and explained complex scientific findings.
- Provided training and mentored research assistants, students, and junior staff.
- Developed and presented research proposals, managing project budgets effectively, and secured 3 research funding.
- Managed a 7-member research team and partnered with businesses to launch a successful e-commerce platform.

Scientific Writing and Publishing
- Authored and co-authored over 20 scientific publications in peer-reviewed journals.
- Presented research findings at prestigious conferences such as ACS, TMS, Commonwealth Chemistry Posters, and IRRC.

SKILLS

Technical Skills:
- **Laboratory Information Management Systems (LIMS):** Proficient in utilizing LIMS for streamlined data management and reporting, improving efficiency and data accuracy.
- **Microsoft Office Suite:** Expert in Word, Excel (including PivotTables, Power Pivot, Power Query, and Macros), PowerPoint, and Outlook for efficient document creation, data manipulation, and communication.
- **Project Management Tools:** Adept at using Trello and Gantt Charts for effective project planning and organization.
- **Cloud Storage:** Utilize OneDrive and Dropbox for secure and accessible data storage.
- **Video Conferencing:** Proficient in Microsoft Teams and Zoom for seamless communication and collaboration.
- **Microsoft 365:** Utilize features for efficient workflow management, calendar and scheduling, and mailbox management.

Data Analysis and Visualization:
- **Statistical Analysis:** Skilled in applying statistical methods for data interpretation.
- **Programming Languages:** Proficient in SQL and Python with libraries like NumPy, Pandas, and Matplotlib for data manipulation, analysis, and visualization.
- **Data Visualization:** Adept at creating clear and insightful visualizations using Power BI and advanced Excel functions.

Laboratory Skills:
- **Analytical Techniques:** Strong background in LC-MS, UV-Vis, FTIR, ICP-MS, NMR, SEM, TEM, DLS, and Microwave Digestion for qualitative and quantitative analysis.

- **Data Management and Reporting:** Skilled in data entry, verification, and updates using various software and Excel. Experienced in creating reports with clear and concise data visualization.

Soft Skills:
- **Communication and Collaboration:** Clear and concise communicator via email, phone, and in-person interactions. Adept at collaborating with colleagues and fostering a positive work environment.
- **Organization and Time Management:** Strong organizational skills with the ability to prioritize tasks and manage time effectively to meet deadlines.
- **Data Integrity and Workflow Optimization:** Employs rigorous data analysis and record-keeping practices to ensure data accuracy and streamline workflows.
- **Solution-oriented:** Actively contributes to team discussions, working together to identify and implement solutions.
- **Adaptability:** Effectively learns new systems and processes quickly to adapt to evolving needs.

EDUCATION

Nottingham Trent University, United Kingdom
MRes. Pharmaceutical Analysis | Distinction | 2024

University of Benin, Nigeria
M.Sc. Chemistry | Distinction | 2012

Ambrose Alli University, Nigeria
B.Sc. Industrial Chemistry | Second Class Upper Division | 2008

West African Secondary School Certificate
Ugha – Obagie Mixed Secondary School **|** 2002

PROFESSIONAL MEMBERSHIP

- The Community Research4Life Programmes
- Chemical Society of Nigeria. (CSN).
- Organization for Women in Science for the Developing World (OWSD)
- Materials Science and Technology Society of Nigeria (MSN)
- American Chemical Society (ACS)
- Associate Member, Royal Society of Chemistry (AMRSC)

HOBBIES

- Traveling
- Sports
- Entertainment: Movies and Music
- Cooking
- Reading