

8h REGISTRATION

**8h30 OPENING CEREMONY**  
 CHAIR | Yin Li  
**Introduction for TWAS Young Affiliates Network**

- Vivaldo Moura Neto (TWAS-ROLAC)
- Luiz Davidovich (BAS)
- Manuel Limonta (ICSU-ROLAC)
- Max Paoli (TWAS)

**KEYNOTE LECTURE**  
 Sergio DJ Pena (UFMG) | Molecular Portrait of Brazil

10h COFFEE BREAK

**10h30 TWAS-Elsevier Foundation Special Session**  
 CHAIR | Max Paoli

1. The role of science for sustainable development (Max Paoli)
2. The Elsevier Foundation: support for sustainability (Juliana Trajano)

**TWAS-Elsevier Foundation Sustainability Case Studies Competition Winners**

1. Abiola Ezekiel Taiwo
2. Susan Moraa Nyasimi
3. Brice Landry Koloko
4. Oscar Donde
5. Rahiel Hagos Abraha

**Brazilian Academy of Sciences Young Affiliate Session**  
 SPEAKER | Eduardo Fraga (UFRJ)  
 Pre-print

12h LUNCH | BOSSA CAFÉ - 3<sup>RD</sup> FLOOR

**13h Workshop: The role of young scientists in achieving the UN Sustainability Development Goals**  
 Introduction to the sustainability workshop and splitting into groups  
 Discussion workshops (3 thematic groups)  
 Mini presentations of action points

15h POSTER SESSION | FOYER

**16h30 Workshop: "Opportunities within TWAS ROs"**

19h DINNER AND SOCIAL ACTIVITIES | CONFERENCE DINNER

8h30

**Oral Session 1**

1. Mirabbos Hojamberdiev\*  
 FLUX GROWTH OF TRANSITION METAL OXYNITRIDE CRYSTALS FOR PHOTOCATALYTIC WATER SPLITTING
2. Chin Ping Tan\*  
 MITIGATION OF 3-MONOCHLOROPROPANE-1,2-DIOL AND GLYCIDOL ESTERS IN REFINED PALM OIL VIA MODIFIED REFINING PROCESS
3. Amal Amin Ibrahim  
 YEARS WITH CHEMISTRY AND NANOTECHNOLOGY FROM RESEARCH TO LIFE PATHWAY
4. Emad Yousif Al-Sarraj  
 PHOTOSTABILIZING EFFICIENCY OF POLY(VINYL CHLORIDE) IN THE PRESENCE OF ORGANOTIN(IV) COMPLEXES AS PHOTOSTABILIZERS
5. Murad AlDamien  
 [(P4W6O34)2CO2NA2(H2O)2]18-: A NEW, CARBON-FREE, POLYOXOMETALATE (POM) CATALYST FOR OXIDATION OF WATER
6. Atunga Nyachio  
 IN VITRO AND IN VIVO EVALUATION OF THERAPEUTIC EFFICACY OF PHAGES AGAINST MULTIDRUG RESISTANT STAPHYLOCOCCUS AUREUS (MDRSA)
7. Emeke E. Oguzie  
 BIOMASS EXTRACTS INHIBIT METAL CORROSION
8. Monther A. Khanfar  
 CRYSTAL STRUCTURE AND COUNTERPOISE-CORRECTED ENERGIES, NBO, HOMO, LUMO AND F<sub>1</sub> AND F<sub>2</sub> INTERACTION ENERGIES OF UNUSUAL [CH3S12]SBF6 SALT
9. Musharraf Syed Ghulam  
 DIGGING OF PHYTOCHEMICALS USING MASS SPECTROMETRY MACHINES

10h COFFEE BREAK

**10h30 Oral Session 3**

1. Olaniyi A Fawole\*  
 VALUE ADDING POTENTIAL OF POMEGRANATE FRUIT PEEL: A PHARMACOLOGICAL PROSPECTIVE
2. Roula M. Abdel-Massih\*  
 ANTIBACTERIAL ACTIVITY OF LEX PARAGUARIENSIS (YERBA MATE) AGAINST GRAM POSITIVE AND GRAM NEGATIVE BACTERIA
3. Adejuwon A. Adeneye  
 GLUCOSE UTILIZATION AND ANTI-OXIDATIVE MECHANISMS OF THE AQUEOUS HUNTERIA UMBELLATA SEED EXTRACT IN ALLOXAN-INDUCED HYPERGLYCEMIC RATS
4. Ahmed E. Abdel Moneim  
 OLIVE (OLEA EUROPAEA) LEAF METHANOLIC EXTRACT PREVENTS HCL/ETHANOL-INDUCED GASTRITIS IN RATS BY ATTENUATING INFLAMMATION AND AUGMENTING ANTIOXIDANT ENZYME ACTIVITIES
5. Simeon F. Kouam  
 MEDICINAL PLANTS AS SOURCE OF BIOACTIVE NATURAL COMPOUNDS

12h LUNCH | BOSSA CAFÉ - 3<sup>RD</sup> FLOOR

**13h Oral Session 5: Invited talks**

1. Silvia Barros (IUTOX)  
 TITLE | PARTNERS IN PROGRESS: IUTOX AND THE TWAS YOUNG AFFILIATE NETWORK
2. Charlotte Grawitz (EURAXESS - BRAZIL)  
 TITLE | BOOST YOUR RESEARCH CAREER WITH EU FUNDING AND TOOLS
3. Oscar Reyes (ICSU-ROLAC)  
 TITLE | STRENGTHENING INTERNATIONAL SCIENCE FOR THE BENEFIT OF SOCIETY
4. Juliana Trajano (ELSEVIER FOUNDATION)  
 TITLE | ETHICAL SCIENTIFIC PUBLISHING

14h30 COFFEE BREAK

15h POSTER SESSION | FOYER

**16h30 WORKSHOP: "OPPORTUNITIES FOR COOPERATION"**

19h DINNER AND SOCIAL ACTIVITIES

**Oral Session 2**

1. Rym Kefi\*  
 DNA TYPING FOR GENETIC DISEASES INVESTIGATION AND HUMAN IDENTIFICATION
2. Samir Abbes\*  
 MONTMORILLONITE CLAY AND LACTOBACILLUS PARACASEI BEJ01 MIXTURE COUNTERACTED IMMUNO-PHYSIOLOGICAL ALTERATIONS FROM AFB1 IN RATS
3. Sok Ching Cheong  
 DEVELOPING THE RESOURCES TO COMBAT AN ASIAN CANCER
4. Stevens Rehen  
 NEW INSIGHTS ABOUT ZIKA VIRUS INFECTION USING IPS CELLS
5. Subhabrata Chakrabarti  
 FUNCTIONAL GENOMIC INTERACTIONS IN A CONGENITAL BLINDING DISEASE AMONG CHILDREN IN THE DEVELOPING WORLD
6. Yusuf Baran  
 MOLECULAR MECHANISMS OF MULTI DRUG RESISTANCE AND ITS REVERSAL IN CANCER
7. Alexander De Luna  
 UNDERSTANDING HOW GENES, ENVIRONMENT, AND THEIR INTERACTIONS INFLUENCE AGING AND LONGEVITY

**Oral Session 4**

1. Andrea Paula-Lima\*  
 RYR2-MEDIATED CALCIUM RELEASE AND MITOCHONDRIAL ROS GENERATION PARTAKE IN THE SYNAPTIC DYSFUNCTION CAUSED BY AMYLOID BETA PEPTIDE OLIGOMERS
2. Flavia Lima Ribeiro Gomes\*  
 SEQUENCE OF IMMUNE RESPONSE IN NON-CEREBRAL AND CEREBRAL EXPERIMENTAL MALARIA
3. Collet Dandara  
 PHARMACOGENOMICS: A PRIMER FOR PRECISION MEDICINE IN AFRICA
4. Patricia Zancan  
 CANCER BIOENERGETICS: NOVEL INSIGHTS INTO TARGETS AND DRUGS
5. Federico David Brown Almeida\*  
 EVOLUTIONARY ORIGINS OF STEM CELLS
6. Jalila Ben Salah- Abbes  
 ABILITY OF LACTOBACILLUS PLANTARUM MON 03 TO ADHERE TO CACO-2 CELLS IN VITRO AND TO MITIGATE AFB1 INTESTINAL CELLS DAMAGE IN VIVO

**Oral Session 6: Brazilian Academy of Sciences Young Affiliate Session: Top Science with Low Funding**

- Brenno Neto (UFRGS)
- Carolina Cotta (UFRJ)
- Carolina Horta (UFG)
- Gustavo Menezes (UFMG)
- Leonardo Travassos (UFRJ)

8h30

**Oral Session 6**

1. Christian A.M. Wilson\*  
 FUNCTIONAL STUDIES OF THE BIP CHAPERON PROTEIN AND HIS ROLE IN PROTEIN TRANSLOCATION
2. Hudaa Neetoo\*  
 MODELING THE GROWTH OF LISTERIA INNOCUA AND SPOILAGE BACTERIA IN COOKED TUNA LOINS
3. Rafael V. C. Guido  
 DISCOVERY OF ENOBLOCK AS PLASMODIUM FALCIPARUM ENOLASE INHIBITOR: MECHANISM OF INHIBITION, X-RAY CRYSTALLOGRAPHY, IN VITRO AND IN VIVO STUDIES
4. Yraima Cordeiro  
 SEARCHING FOR ANTI-SCRAPIE COMPOUNDS USING A BIOCHEMICAL AND BIOPHYSICAL ASSAY PLATFORM
5. Ranga Rao Ambati  
 BOTRYOCOCCLUS BRAUNII: AN ALTERNATIVE SOURCE OF CAROTENOIDS AND ITS POSSIBLE APPLICATIONS
6. Yin Li  
 PRODUCTION OF CHEMICALS FROM CO2 BY ENGINEERED CYANOFACORIES
7. Franco Martin Carberizo  
 B-CARBOLINE ALKALOIDS: PHOTOSENSITIZING PROPERTIES AND BIOTECHNOLOGICAL APPLICATIONS

10h COFFEE BREAK

**10h30 Oral Session 8**

1. Emmanuel Unuabonah\*  
 HIGHLY EFFICIENT REMOVAL OF ENTERIC BACTERIA FROM WATER WITH HYBRID CLAY COMPOSITES
2. Marcelo Farina\*  
 ENDURING NEUROTOXIC EFFECTS OF PERINATAL EXPOSURES TO PESTICIDES IN MICE
3. Etinosa Igbinsosa  
 THE DYNAMICS OF ANTIBIOTICS AND ANTIMICROBIALS IN RESERVOIRS: ECOLOGICAL AND PUBLIC HEALTH RISK
4. Ajay Kumar Jha  
 WASTE TO ENERGY POTENTIAL MAPPING FOR COMMERCIAL WASTE IN NEPAL
5. Jamel Jebali  
 BIOCHEMICAL AND PROTEOMIC RESPONSES IN MEDITERRANEAN CRAB: EFFECTIVE TOOLS TO EVALUATE THE TOXIC EFFECTS OF MARINE CONTAMINANTS
6. David P Tchouassi  
 A NOVEL SANDFLY-BORNE PHLEBOVIRUS FROM EAST AFRICA
7. Chabi Djiagoun  
 NICHE OVERLAP AND RESOURCE PARTITIONING BETWEEN RARE TOPI ANTELOPE (DAMALISCUS KORRIGUM) AND OTHER SYMPATRIC BULK GRAZERS IN PENDJARI BIOSPHERE RESERVE (NORTHERN BENIN): IMPLICATION FOR TOPI CONSERVATION
8. Ronald Vargas  
 ELECTROCATALYTIC OXIDATION OF ORGANIC POLLUTANTS: KINETIC CONSIDERATIONS FOR ENVIRONMENTAL APPLICATIONS

12h LUNCH | BOSSA CAFÉ - 3<sup>RD</sup> FLOOR

**13h Oral Session 10: The importance of Science Communication & Diplomacy in the developing world**

- Maria Augusta Arruda (UNIVERSITY OF NOTTINGHAM | FARMANGUINHOS-FIOCRUZ)\*  
 TITLE | SCIENCE FOR DIPLOMACY, DIPLOMACY FOR SCIENCE
- Luiz Davidovich (UFRJ | BAS PRESIDENT)  
 TITLE | SCIENCE, POLICY AND GOVERNANCE: INVENTING THE FUTURE

**Young Science Diplomats:**

- Yusuf Baran (TYAN)
- Amal Amin (TYAN)
- Almas Taj Awan (UFSCAR, BRASIL)

14h30 - 15h CLOSING CEREMONY

**Oral Session 7**

1. Nudrat Aisha Akram\*  
 CROP DROUGHT TOLERANCE: STRATEGIES AND IMPROVEMENTS
2. Pablo Bolanos-Villegas  
 REGULATION OF EMBRYO DEVELOPMENT IN TROPICAL FRUIT PLANT CARICA PAPAYA
3. Victorien Dougnon  
 EFFECTS OF BIODIGESTION OF CHICKEN MANURE ON THE HYGIENIC QUALITY OF LEAVES OF SOLANUM MACROCARPON LINN (SOLANACEAE) PRODUCED IN URBAN AGRICULTURE
4. Luna Kamau  
 UNCONVENTIONAL APPROACHES TO MOSQUITO CONTROL: INTERFERENCE WITH MALE MOSQUITO FERTILITY
5. Frederick Adzitey  
 PREVALENCE OF RESISTANT ESCHERICHIA COLI ISOLATED FROM PASTEURISED COW MILK AND ITS RELATED SAMPLES IN THE TAMALE METROPOLIS OF GHANA
6. Adevale Adewuyi  
 BIOPRESERVATION FROM GLURICIDIA SEPRIUM AND BAPHIA NITIDA: A RENEWABLE SOURCE OF ENERGY FOR SUSTAINABLE DEVELOPMENT IN RURAL AFRICA

**Oral Session 9**

1. Lawrence Kazembe\*  
 MULTI-SPERM HAZARD MODELS FOR FERTILITY DYNAMICS WITH UNOBSERVED SPATIAL HETEROGENEITY
2. Jamil Mubasher\*  
 PARTICLE DYNAMICS AROUND ROTATING BLACK HOLE
3. Bolanle Ojokoh  
 ANSWER EXTRACTION FROM AN ACADEMIC QUESTION ANSWERING SITE
4. John Fredy Barrera Ramirez  
 DATA PROTECTION USING OPTICAL ENCRYPTION
5. Haikel Jelassi  
 WEAKLY-BOUND MOLECULES OBTAINED BY LASER-ASSOCIATION OF COLD ATOMS, AND THE ANALYSIS BY THE VIBRATIONAL QUANTUM DEFECT
6. Hassane Bouzahir  
 ON SWITCHED HYBRID DYNAMICAL SYSTEMS: STABILITY AND SIMULATION
7. Luis Zapata  
 RELICS FROM A VIOLENT PROTOSTELLAR MERGER IN ORION

**TO READ ABOUT THE SPEAKERS**



SCAN THE QR CODE OR ACCESS:

[WWW.ABC.ORG.BR/SPEAKERSTYAN](http://WWW.ABC.ORG.BR/SPEAKERSTYAN)

COPACABANA A ROOM  
 COPACABANA B ROOM

\*SESSION CHAIR