

# Geophysical and structural approach to lithotectonic mapping of sedimentary basins

Agate/WAXI Training

30 September to 4 October 2024

Accra, Ghana



**This 5-day training course is intended to provide an overview of new state-of-the-art techniques in mapping sedimentary terrane using integrated geophysical and field method.**

This course is designed for geologists who want to advance their knowledge of contemporary integrated structural geophysics mapping techniques of sedimentary basins.

All attendees are urged to bring their own regional datasets because they will be instructed on case studies using regional data.

The training course is organised by Daniel Kwayisi (UG), Prince O. Amponsah (UG), Samuel Nunoo (UG), Abigail E. Ayikwei (UG), who together have over twenty years of experience in lithostructural mapping, interpretation and modelling of geophysical data.

## **Attendees' Data Sets**

All participants will have the chance to take part in group interpretations of their individual data sets. In order for the audience to comprehend the regional or local context of the data, attendees who wish to provide datasets for discussion should prepare a 5-slide introduction to their area of interest.

Both processing and interpretation procedures can be carried out if digital data are accessible.

# Programme

*All lectures will be face-to-face*

*All field exercises will be in person under the supervision of the WAXI team*

<i>Day</i>	<i>Date</i>	<i>Course Element</i>	<i>Lecturer</i>
Day 1 9am to 4pm	<b>Monday 30 Sept</b> Lectures  Exercises	1. Introduction: Sedimentary basins and their characteristics 2. Physical properties of sedimentary basins and their geophysical signatures  Collaborative Case Study: some selected basins	AEA  AEA
Day 2 9am to 4pm	<b>Tuesday 1 Oct</b> Lectures  Exercises	3. Geophysical data processing 4. Data integration 5. Structural Geophysics  Collaborative Case Study: Interpreting Structures	AEA  AEA
Day 3 9am to 4pm	<b>Wednesday 2 Oct</b> Lectures  Exercises	6. Geological field mapping strategies in sedimentary terranes  Collaborative Case Study: Sedimentary map interpretation	POA/DK/SN  POA/DK/SN
Day 4 5am to 6pm	<b>Thursday 3 Oct</b> Field excursion	Field campaign (ground truthing of processed data and map making) - Voltaian Sedimentary Basin - Eastern region of Ghana	POA/DK/SN
Day 5 9am to 4pm	<b>Friday 4 Oct</b> Lectures	Interpretation of field data and map compilation	ALL

*All practical training will be provided on PC's provided by attendees.*

*All relevant data will be provided, although attendees should have access to their own GIS software, if possible, if not they will be provided with QGIS.*

# Information

**Course Leaders: Daniel Kwayisi (coordinator), Prince Ofori Amponsah, Samuel Nunoo, Abigail Ayikwei**

## **Daniel Kwayisi**

Senior Lecturer at the university of Ghana, Daniel Kwayisi has about ten (10) years' experience in geological field work and mineral exploration. Daniel has carried out extensive research into the Precambrian geology of Ghana and actively involved in base metal and industrial mineral exploration.

## **Prince Ofori Amponsah**

Senior Lecturer and a lead consultant at the University of Ghana and Azumah Resources Limited respectively and has over fourteen (14) years of experience in field and practical based structural geology and metallogeny.

## **Samuel Nunoo**

Lecturer at the University of Ghana and has over ten (10) years of experience in field and practical based structural geology and metallogeny.

## **Abigail Ayikwei**

Lecturer at the University of Ghana and has a vast experience in interpretation and modelling of aeromagnetic, radiometric and other regional geophysical data in 2 and 3D.

## **Registration Fees**

For the full 5 days of training, including training materials, lunch, morning and afternoon tea.

WAXI Sponsors US\$1,750 per attendee - Non-WAXI sponsors AU\$1,900 per attendee.  
Invoice of currency AU\$.

## **Language**

English

## **Where**

Institute of Statistical Social and Economic Research (ISSER), Seminar room, University of Ghana, Accra and one day field excursion Eastern region of Ghana.

## **Duration**

5 days

## **Time**

09:00 am - 05:00 pm Accra Time - Face to Face training

## **Certificate of Attendance**

Upon completion, participants will receive a certificate of attendance



Knowledge, Skills, Networks in Earth and Planetary Science

**Geophysical and structural approach to lithotectonic  
mapping of sedimentary basins 30th September to 4th October  
2024 - complete and return this form**

Company .....

Address .....

.....

Phone .....

Administrative Email contact .....

Attendee's Name 1.....

Attendee's Name 2.....

Attendee's Name 3.....

Attendee's Name 4.....

Total Registration Fees .....

Invoice addressed to:.....

WAXI Sponsors US\$1,750 per attendee - Non-WAXI sponsors AU\$1,900 per attendee

\* Net price - (Any additional tax will be added). Invoice of currency AU\$.

Email: [Corinne.Debat@agate-project.org](mailto:Corinne.Debat@agate-project.org)

On confirmation of your places, we will ask you to transfer the registration fee to a bank account to be announced. **Registration valid only when the invoice is paid in full**