

## **Session Program**

Oct 16 – 18, 2026



## **3rd TAGRA**

### ***Mathematics, Modelling, and Computational Foundations***

Gumushane, Gumushane University  
Gumushane University Campus, Gumushane, Türkiye

## Sat, October 17

11:20 AM

### Mathematics, Modelling, and Computational Foundations

**Session** | **Location:** Gumushane, Gumushane University, Gumushane University Campus, Gumushane, Türkiye

11:20 – 11:35 AM

#### Dynamics and Mathematical Analysis of a Chronic HBV Epidemic Model with Control Strategies

**Speaker**

Ms T MEGALA

11:35 – 11:50 AM

#### Generalized Theoretical Model of Energy Spectrum Transformation and Density of States Reconstruction in Semiconductor Nanostructures Under Quantum Confinement

**Speaker**

Dr Raida IBAEVA

11:50 AM – 12:05 PM

#### Investigation of Nanotechnological Impact and Production Forecasting in the Recovery of Residual Oil Reserves at the Final Stage of Exploitation

**Speakers**

Konul JABBAROVA, Nurlana AGAYEVA

12:05 – 12:20 PM

#### Takagi–Sugeno Fuzzy Fractal-Fractional Modelling of PUBG Mobile Addiction with Real-Data

**Speaker**

Ms TAMIL VIZHI MARIAPPAN

12:20 – 12:35 PM

**Break**

12:35 – 12:50 PM

#### Asymptotic Solution of a Singularly Perturbed System of Fredholm Integral Equations

**Speaker**

Peyil ESENGUL KYZY

12:50 – 1:05 PM

#### Free Vibration Analysis of Isotropic Plates Using a Q4 Finite Element

**Speaker**

Dr Mehmet Fatih ŞANSVEREN

1:05 – 1:20 PM

#### Fractal Calculus: A Geometrical Framework for Analysis on Fractal Sets

**Speaker**

Prof. Alireza KHALILI GOLMANKHANEH

1:35 PM