Mathematical modeling of some thermohydrodynamic and viscoelastic processes

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In our group, based on the already developed mathematical models of the mesoscale boundary layer of the atmosphere and J. Boll's viscous-elastic beam, we will consider the following problems:

1)Breeze circulations taking into account humid processes (fog, clouds);

2) Aerosol distribution in the atmosphere and sea;

3) Genesis of smog in the atmosphere;

4) Calculation of J. Boll's beam in the functional dependence of viscosity on temperature and pressure;
5) J. Boll beam calculation using variable point heat sources in time and space (imitation of electric welding). These issues can be used in connection with the Black Sea-related topic "Blue Development of the Black Sea" (seaside atmospheric processes; Anaklia Port; planned artificial island near Batumi; various information cables "laid" in the sea...).