**AUTHOR CONTRIBUTION STATEMENT**

Following the CRediT (Contributor Roles Taxonomy) guidelines:

* • **Conceptualization**: [Author names]: Formulation of research goals and aims
* • **Methodology**: [Author names]: Development of models and experimental design
* • **Software**: [Author names]: Programming and software development
* • **Validation**: [Author names]: Verification of experimental results
* • **Formal Analysis**: [Author names]: Statistical and data analysis
* • **Investigation**: [Author names]: Conducting experiments
* • **Resources**: [Author names]: Provision of computational resources
* • **Data Curation**: [Author names]: Data management and annotation
* • **Writing - Original Draft**: [Author names]: Preparation of initial manuscript
* • **Writing - Review & Editing**: [Author names]: Critical review and revision
* • **Visualization**: [Author names]: Creation of figures and visualizations
* • **Supervision**: [Author names]: Oversight and leadership responsibility
* • **Project Administration**: [Author names]: Management and coordination
* • **Funding Acquisition**: [Author names]: Acquisition of financial support