I.M. Systems Group, Inc. (IMSG) www.imsg.com, leading a Scientific and Technical Support Team (IMSG Team, consisting of IMSG, Inc. and subcontracting companies) is looking for qualified **scientists, analysts, software/system engineers, and product developers** to strengthen our existing staff team and provide support to the NOAA Research to Operations for Next Generation Global Prediction System (NGGPS) program. NOAA/NWS leads an effort in continued advancement of operational global prediction capabilities, including migration to next-generation supercomputing, and the development of the NGGPS. The overall effort is to accelerate improvements in the nation's environmental prediction capabilities by developing environmental numerical weather predictions to longer time scales and multiple coupled regimes. This shall be accomplished through improved coupling between component models such as atmosphere, ocean, land surface, ice, and coastal prediction systems. The overall intent of this program is to enhance numerical weather prediction guidance, to unify operational systems under a single framework in order to more easily share common structures/ components and to expedite interoperability. We are working in an applied science and R&D environment monitored or led by U.S. government scientists, managers, and principle investigators, and working along with other U.S. government, research institutes, and private industry staff. These positions are located at the NOAA Center for Weather and Climate Prediction (NCWCP) building in College Park, Maryland. Actual hiring of candidates will be after mid-May 2015, pending the potential Task Order award to IMSG.

The scope of work mainly supports NOAA NCEP EMC in the following areas:
1. Technical support for the NOAA Environmental Modeling System (NEMS) common superstructure development – accelerate NEMS development and operational implementation. The development shall include prototyping for a fully coupled system with standardized interfaces for atmospheric, ocean, ice, waves, and land.
2. Upgrade of Infrastructure at NCEP/EMC – provide technical and software engineering support to improve software architecture and system engineering to accelerate infrastructure upgrades.
3. Scientific research and development for upgrade of modeling components and data assimilation techniques – provide scientific research and development support and gap mitigation for overall unified global modeling approach including coupled modeling and coupled components such as ocean, wave, sea ice, and atmosphere through NEMS framework.

Specific Positions include:
Senior Scientist – shall have extensive experience in the use of and knowledge of theory and applications of most aspects of environmental modeling; and background in oceanography, data assimilation techniques and prediction at longer time-scale processes. Extensive experience with use and interpretation of numerical weather prediction development of existing products and applications in a research-to-operations setting is mandatory. Knowledge and experience of the following is required: a) algorithms underpinning the NOAA/NWS/NCEP modeling suites; b) operational algorithms and procedures for various environmental parameters.

Education/Experience Requirement: PhD in Atmospheric Science, Oceanography, Other Physical Sciences, Physics, Astronomy, Engineering, or Mathematics, 15 + years. Experience shall include the following. At least 10 years of research related to science or engineering problems, or Experience in leading either or both atmospheric and oceanographic research.

Support Scientist III – must be able to perform all of the duties of the Support Scientist II, as well as perform scientific research or develop modeling and data assimilation approaches for numerical weather models to use environmental parameter measurements derived from remote sensing. Education/Experience Requirement: M.S. in Atmospheric Science, Oceanography, Other Physical Sciences, Physics, Astronomy, Engineering, or Mathematics, four + years. Experience shall include the following. At least four years of research related to science or engineering problems, or Experience in either or both atmospheric and oceanographic research.

Support Scientist II – Perform scientific analysis/research in support of more senior level scientists. Education/Experience Requirement: Bachelor's Degree in Atmospheric Science, Oceanography, Other Physical Sciences, Engineering, Physics, or Mathematics, two + years. Scientific research experience.

Scientific Analyst II – Supports or directly analyzes, designs, codes, and documents complex applications to develop remote sensing algorithms for environmental parameter measurements. Performs technical tasks using both standard and nonstandard analysis, design, and programming methods and techniques. Analyzes problems in terms of such factors as user requirements, input data and form, output data and form, available computer configuration, processing turnaround requirements, input and output checking, and overall problem-schedule requirements. Education/Experience Requirement: Bachelor's Degree in Atmospheric Science, Oceanography, Other Physical Sciences, Engineering, Physics, or Mathematics, two + years. Scientific research experience.

Engineer IV – Must be able to perform all of the duties of the Engineer III, as well as manages, directs, and carries out complex assignments often requiring the development of new concepts, techniques and procedures. Requires experience in managing diverse functional and subordinate activities and groups of technical and administrative personnel. May analyze, design, code, and document complex applications to develop remote sensing algorithms for environmental parameter measurements. Requires experience in management and control of large budgets for complex, multi-task, commercial and government contracts. Provides communication to all levels of management and staff for planning and control of projects and communicates with customer and agency representatives. Formulates and reviews project feasibility studies, determines costs, and ensures that work standards, schedules, policies, purposes, and goals are communicated to subordinates and subcontractors for the performance of work. Prepares and delivers presentations to colleagues, subordinates, and government representatives. Education/Experience Requirement: A Bachelor of Science degree plus 12 years of relevant work experience is required.

Engineer III – Must be able to perform all of the duties of the Engineer II, as well as work with minimal oversight, carries out assignments often requiring the development of new tools or improved methods, techniques and procedures. Displays expert and innovative use of concepts and principles in conducting complex assignments. May Analyze, design, code, and document complex applications to develop modeling and data assimilation approaches for numerical weather models to use environmental parameter measurements derived from remote sensing. Develops related findings, conclusions and recommendations and prepares and presents client reports. Education/Experience Requirement: A Bachelor of Science degree plus 8 years of relevant work experience is required.

Engineer II – Must be able to work under moderate supervision in the application of engineering knowledge, carries out professional assignments that require use of conventional analysis programs, approaches, or techniques to support technical programs. Develops findings, conclusions and recommendations and prepares and presents client reports or sections thereof. Education/Experience Requirement: A Bachelor of Science degree plus 4 years of relevant work experience is required.

Product Developer – Shall have a background in atmospheric or marine science, oceanography, ecosystem processes is desirable. Experience with use and interpretation of satellite infrared and visible data aid in development of remote sensing products and/or applications, would be advantageous but is not required. Experience in environmental modeling. Experience with the use of UNIX and MS Windows computing environments is mandatory. Computer skills needed to complete this task are a working knowledge of one or more of: FORTRAN and/or C, HTML, Perl, and JavaScript. Strong oral and written communication skills are also necessary. Education/Experience Requirement: A Bachelor of Science degree plus 8 years of relevant work experience is required.

Annual salary is negotiable based on candidate qualifications and project funding availability.

To Apply:

Please apply directly to our career portal: **https://careers-imsg.icims.com** (*NOA1610 ST2 – NCEP-R2O 2015*)

 Please be sure upload your resume which should include the contact for 3 references. Also, your cover letter must explain how your qualifications meet the requirements of the position.

IMSG offers an outstanding overall Benefit Package including company paid leave, medical, dental, vision, and 401K. Please indicate your timeline of availability and preferred salary level for consideration.

IMSG is an Equal Opportunity Employer and Veteran Friendly.