

Dr. Bryant
Managerial Expertise

As a Research Engineer (22 Years): I was responsible for working as a team member to accomplish the objective of an overall program to which I was assigned. In this role, I was responsible for implementing a strategy to meet or exceeding the technical objectives of my part of the program. If the approach was found to be not feasible, I was responsible justifying implementing my own approach, or explaining why the objectives could not be technically achieved. Additional responsibilities included evaluating outside proposals from small business (SBIR) and universities (grants) for evaluation of feasibility, funding, monitoring of their progress, and decisions regarding payments and approving necessary changes to the direction of agreed upon contractual work. Lastly, I was tasked with securing my own funding through a competitive proposal process that involved developing a research plan, selecting the skills, personnel and budget, milestones, describing the risks and benefits to the agency (why they should fund this work) and how it had dual use for both the agency and potential commercial markets. For outside activities, I have participated on the technical evaluation boards for Air Force, Army and State level technical funding programs that involve NASA as a funding source.

As a Supervisor (8 Years): I was responsible for and approval/disapproval implementing agency level multiple projects within my branch in terms of personnel assignments, negating agency level work, operating a large budget with both sunk and discretionary costs, negotiating contracts for upgrades, maintenance and equipment purchases, promoting and executing a culture of safety, on and offsite training, short courses, travel to conferences and industry, biannual personnel performance plans, hiring and firing of personnel, and having “difficult” conversations. I oversaw between 70-80 civil servants, contractors, university personnel, technicians, and students occupying major parts of 4 separate buildings. Additionally, I was responsible for approving and executing direct collaboration between my personnel and industry, both national and international partnerships. As a subject matter expert, I have been involved in starting several nationally innovative programs including nanotechnology, bio-inspired, multi-functional structural materials research.

As a Chief Engineer (2 Years): I was responsible for the technical advisement of all the branches (4 with ~250 people total) within the materials and structures discipline at NASA Langley. This involved ensuring that a high degree of technical excellence was being demonstrated by the personnel within this discipline by, developing agency level programs in terms of what needs to be studied, how to implement the research to accomplish this, what companies and other NASA centers the program needs to have discussions with about particular requirements, availability and joint activities in terms of who does what, budgets and schedules, and the implementation of all of these objectives and milestones within the requisite program office who oversees the progress and funding of the multi-year/multi-center agency level activity. Additionally, read, edit and approve every paper and presentation prior to release to export control and the public. I was also a third party facilitator when the technologists had irreconcilable differences with the program managers as to the scope and schedule of the activity. It was my job to sort it out and keep it moving forward.

As a Consultant: Since 2012 I have consulted for companies ranging from several personnel to fortune 100, both public and privately held. When I retired from NASA I expanded my consulting business which meant; developing a website, retaining a law firm to work contracts, getting business insurance, onboarding and training other independent contractors, setting up email and accounting and providing membership to professional societies where I serve as a committee member which increase my visibility and that of my company within the industrial markets to which we provide direction.

Technical Expertise

Robert G. Bryant holds a BS in Chemistry and a Doctor of Science—honoris causa from Valparaiso University, where he is a Distinguished Alumni, and an MS and Ph.D. from the Polymer Institute at the University of Akron.

In 1990, Dr. Bryant joined NASA Langley Research Center as a Materials Engineer where he focused on aerospace polymers, composites, and piezoelectric materials. During his NASA tenure, he held the following positions: Research Materials Engineer; Branch Head; and Chief Engineer for Materials and Structures. In 2012, Dr. Bryant formed a consulting firm, Technoir LLC, offering subject matter expertise in areas related to: polymers, piezoelectric ceramics, composites, adhesives, processing, manufacturing, test equipment selection and design, testing and analysis. In 2024, Dr. Bryant retired from NASA and continues as a consultant for Technoir LLC. During his career, Dr. Bryant has over 150 technical publications and presentations, over 40 US and foreign patents and over 20 commercial licenses. He has earned 3 R&D 100s, the NASA Medal of Exceptional Achievement, Government Invention of the Year, and is an inductee in the following organizations: National Inventors Hall of Fame, The Space Foundations Space Technology Hall of Fame, NASA Inventors Hall of Fame, The New Trier Hall of Honor and is an Eagle Scout.

Dr. Bryant currently serves as a graduate student invention judge for the National Inventors Hall of Fame and as an executive board member for School of Polymer Science and Polymer Engineering at the University of Akron. He is a member of the American Composites Manufacturers Association (ACMA) serving on various technical and organizational committees and a member of the Society for the Advancement of Materials and Process Engineering (SAMPE) where he also serves on various technical committees.