**PROJECT INFO SHEET**

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| **PROJECT STAFF INFO** |

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| **Name-Surname/Title** | Serdal Kaya, Assist. Prof. |
| **Department** | Aeronautical Engineering |
| **Role in the Project** | Principal Investigator |

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| **PROJENİN ADI** |

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| **Partners/Participants/**  **Stakeholders** | TUBITAK |
| **Research Topic** | A New Method for The Synthesis of Beta- and Gamma-Carboline Derivatives: Total Synthesis of Oxopropaline-G |
| **Impacts of the Projects** | Research Papers, M.Sc. Thesis and Patent (Potential) |
| **Keywords** | β-Carboline, γ-Carboline, Oxopropaline-G, Alkyne Cyclization Reaction, Hetero-Diels-Alder Cyclization Reaction |
| **Start-End Date** | 01.04.2019 – 01.10.2022 |
| **Project Budget** | 438.000 TL |

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| **Summary** |  |
| During this research, we will have been performed for the first time in the literature using our synthetic procedure. The pyridine ring found in the carboline structure will be formed for the first time by alkyne cyclization reaction and this method will eliminate both complex synthetic methods and the use of specific chemicals (catalysts etc.). As a result, this method will reduce the cost of the synthetic method. In addition to this, the same strategy will also be applied for the synthesis of Oxopropaline-G. This synthetic method will be shorter and less expensive than those found in the literature. This will make our strategy original as well as offer an opportunity for commercialization. | |
| **Expected and/or Achieved Results** |  |
| At the current point of the project, we have been published two research papers and one M. Sc. thesis under the light of this project. | |