



**BELMONT FORUM / BIODIVERSA
2017-2018 JOINT CALL**

PARTNER SEARCH FORM

Name: Mahmut Sami BÜKER

Title: Dr

Country: TURKEY

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I AM LOOKING FOR : A PARTNER (FOR MY PROJECT) A PROJECT TO JOIN

BRIEF DESCRIPTION OF YOUR PARTNER SEARCH: Looking for partners with a project that includes renewables in the proposal. Renewable based solutions would be provided i.e. energy storage, solar systems, PV/T, solar assisted HVAC, testing, industrial partner.

DESCRIPTION OF THE EXPERTISE/SKILLS

Mahmut Sami Bükler is currently an Assistant Professor in the field of Renewable Energy Technologies. He has received his PhD on Sustainable Energy Technologies at the University of Nottingham, UK. His main interest areas of research are low/zero carbon technologies for buildings, solar thermal and hybrid PV/T systems, solar assisted heating and cooling applications, thermal comfort, thermal energy storage, enhanced heat transfer and thermodynamics. He has worked on several research and innovation projects in the scope funded by EU FP7, Horizon 2020, FTI Pilot, TUBITAK, Sustainable Construction iNet, TSB and national/international based energy companies. With his multidisciplinary background, Dr. Bükler has specialized in the following areas: • Energy and Environment • Building integrated solar technologies • Photovoltaics • Solar Generation Technologies and Control • Solar Thermal Applications • Solar assisted heating- cooling • Solar roofs • Energy optimization • Energy conservation • Energy Management • Modeling and Decision making • Environmental Life Cycle Assessment • Project Management in Energy. As indicated above, sustainable energy technologies including wind/solar powered electricity, renewable assisted HVAC and energy storage, modeling, simulating, testing, optimization, control and management of renewable technologies among the Dr Bükler's expertise. Test area in the city of Konya with SCADA systems and renewable energy systems manufacturer as project partner or subcontractor will be arranged if demanded. Some of Dr Bükler's recent publications are listed below,

• **Buker, M.S.**, Mempoou, B., and Riffat, S.(2014) "Performance Evaluation and Techno-economic analysis of a Novel Building Integrated PV/T Roof Collector: An experimental validation" Journal of Energy and Buildings, Elsevier, 76, 164-175.

• **Buker, M.S.**, and Riffat, S.(2015) "Recent developments in solar assisted liquid desiccant evaporative cooling technology-A review" Journal of Energy and Buildings, Elsevier, 96, 95-108.

- **Buker, M.S.**, Mempoou, B., and Riffat, S.(2015) "Experimental investigation of a Building Integrated Photovoltaic/Thermal Roof Collector combined with a liquid desiccant enhanced indirect evaporative cooling system" *Journal of Energy Conversion and Management*, Elsevier, 101C, 239-254.
- **Buker, M.S.**, and Riffat, S.(2015) "Building integrated solar thermal collectors – A review" *Renewable and Sustainable Energy Reviews*, Elsevier, 51, 327-346.
- **Buker, M. S.**, & Riffat, S. B. (2016). Solar assisted heat pump systems for low temperature water heating applications: A systematic review. *Renewable and Sustainable Energy Reviews*, 55, 399-413.
- **Buker, M. S.**, & Riffat, S. B. (2016). Preliminary performance test of a combined solar thermal roof system with heat pump for buildings. *Energy Procedia*, 91, 421-431.
- **Buker, M. S.**, & Riffat, S. B. (2016). Performance analysis of a combined Building Integrated PV/T Collector with a liquid desiccant enhanced dew point cooler. *Energy Procedia*, 91, 717-727.
- **Buker, M. S.**, & Riffat, S. B. (2017). Build-up and Performance test of a Novel Solar Thermal Roof for heat pump operation. *International Journal of Ambient Energy*, 1-37.
- Allouhi, A., Agrouaz, Y., Amine, M. B., Rehman, S., **Buker, M. S.**, Kousksou, T., ... & Benbassou, A. (2017). Design optimization of a multi-temperature solar thermal heating system for an industrial process. *Applied Energy*, 206, 382-392.