

Environmentally-Powered WSN for Urban-Scale Mapping and Assessment of Air Quality in Qatar

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SUPCOM

Why Urban-Scale Mapping and Assessment of Air Quality Mapping in Qatar?

✓ Harsh Climatic Conditions

✓ Hazardous Emissions

✓ Regional Air Quality Index

✓ Green Telemetry







معهد قطر لبحوث البيئة والطاقة Qatar Environment & Energy Research Institute



















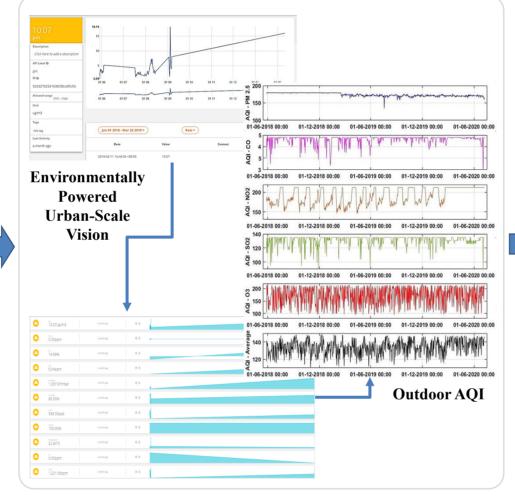




NPRP10 Vision, Impact and Prospects



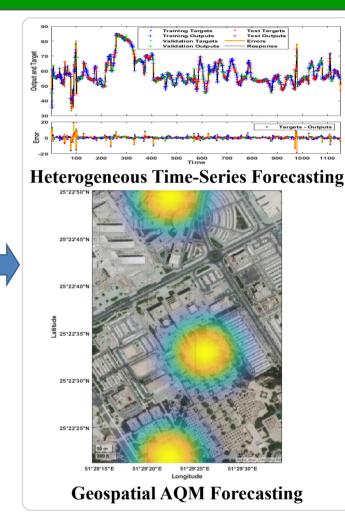
R & D Outcomes



Outdoor AQM Impact

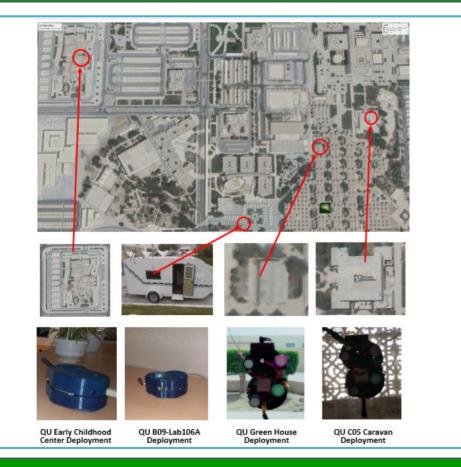


Qatar National Prospects



Future Prospects in Qatar

Objective Indoor and Outdoor Deployments for Long Haul Monitoring



QU Doha, Qatar

- Early Childhood Center, QU, Qatar.
- ESC Caravan, C05, QU, Qatar.
- Green House, CENG, QU, Qatar.
- Lab 106A, B09, QU, Qatar

Nodes Footprints and Live Sensor Calibration

Brescia, Italy

- Municipality Bridge Site, Brescia, Italy.
- City Train Tunnel Site, Brescia, Italy.
- Building Construction Site, Brescia, Italy

Smart AQM Tuesday 10/1/2019, 3:34:19 AM 7 Sites Live on IoT in AQM UI

Conclusion and Applications

GIS-IoT Integration support expands its horizon as the most demanding environmental instrumentation, telemetry and control solutions that facilitates the safe investment and business decisions of 100 years ahead planning and survival of:

- ✓ Smart Environment
- ✓ Real-time Assessment of Urban Environment
- ✓ Environmental Research & Development
- ✓ Investigatory and Strategic Authorities

This contribution has led us to a turnkey product for service.

Data Sets, Methods, Frameworks

- Data sets of 7 Sites will be furnished to collaborating teams.
- Hardware, Software Design and Implementations Details will shared to potential partners.