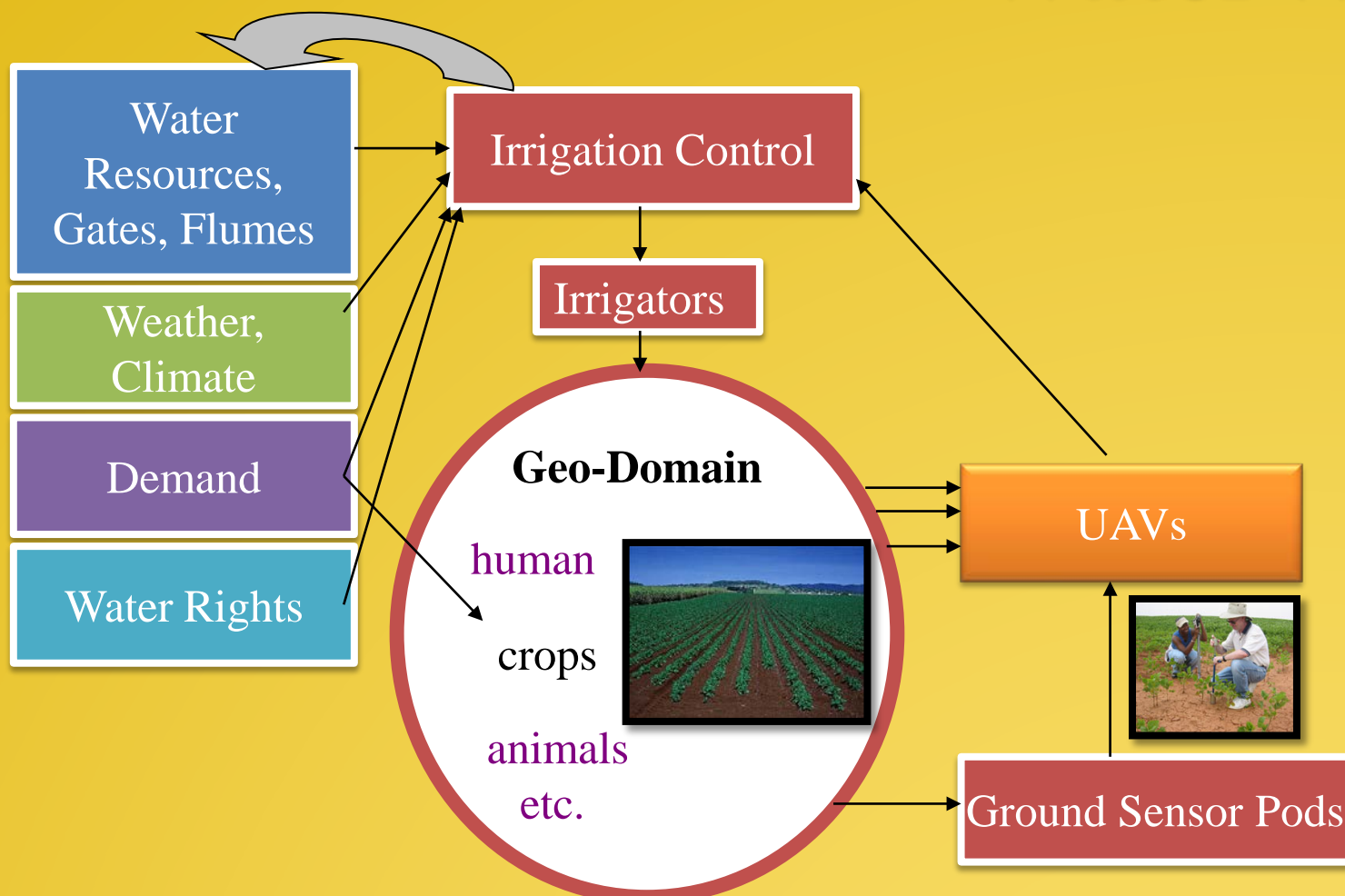


# MESA LAB @ UCMERCED

MECHATRONICS, EMBEDDED SYSTEMS AND AUTOMATION LAB  
<http://mechatronics.ucmerced.edu>

## CYBER-PHYSICAL SYSTEMS

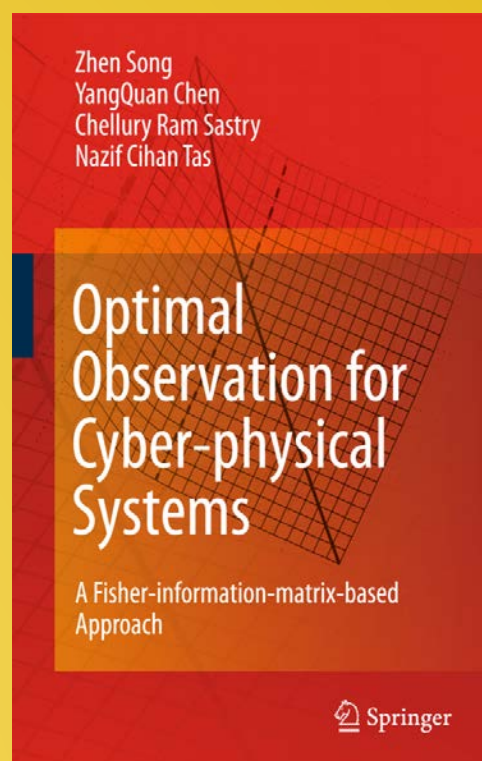
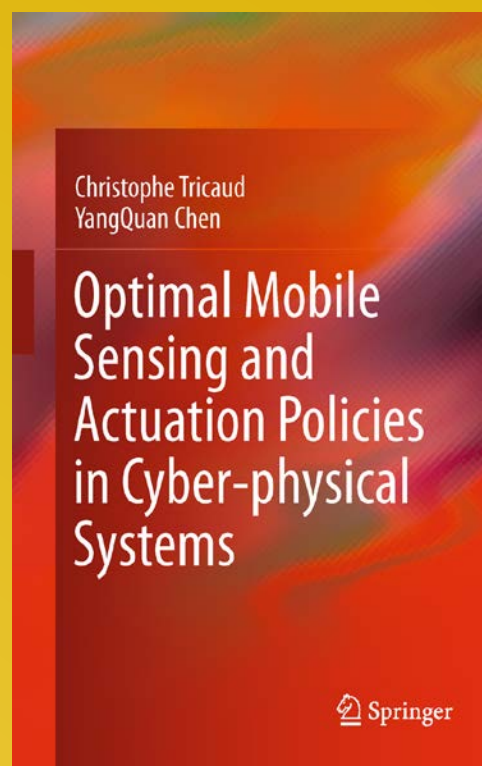
### WaterWatch?



Credit: Dr. YangQuan Chen, 2005

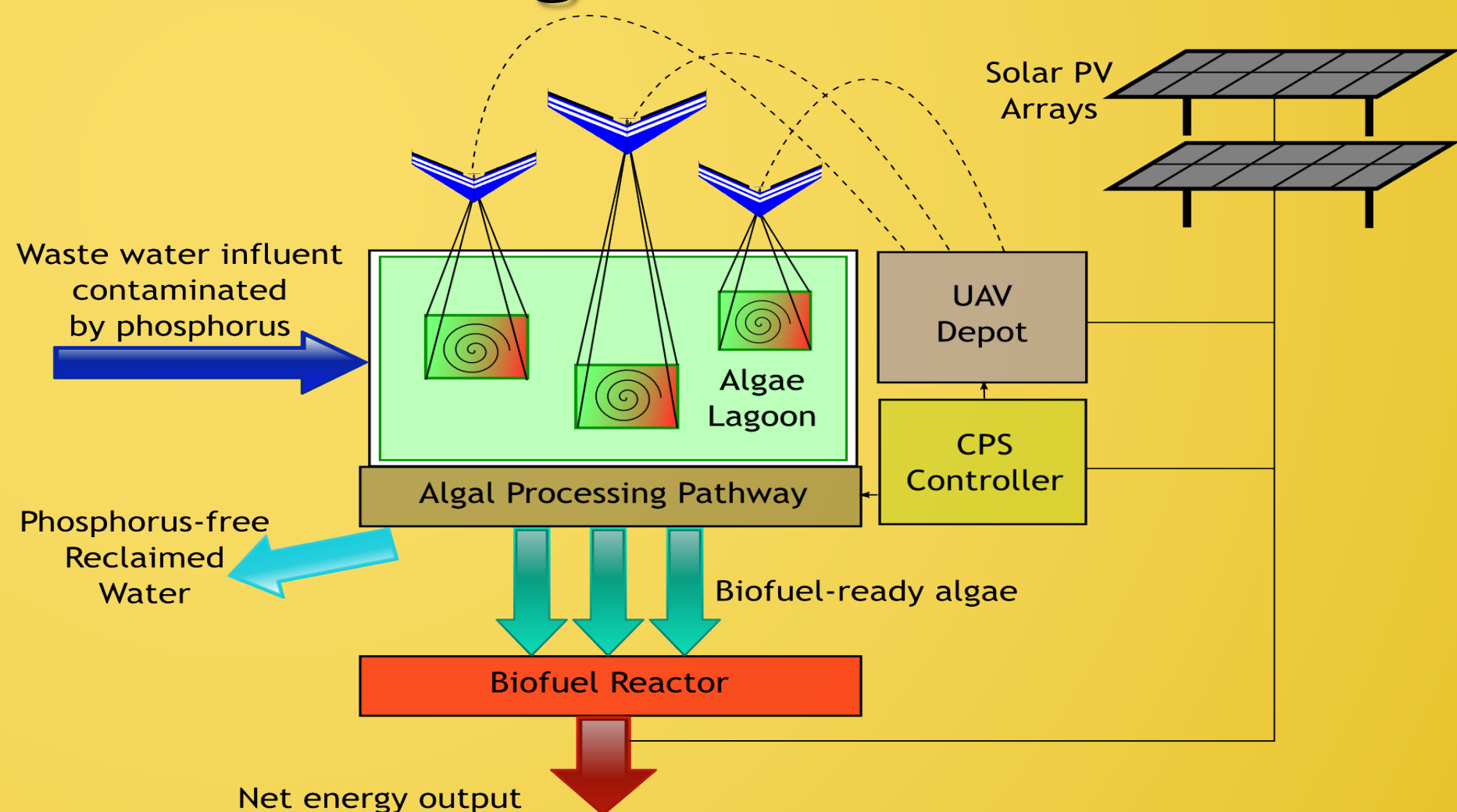
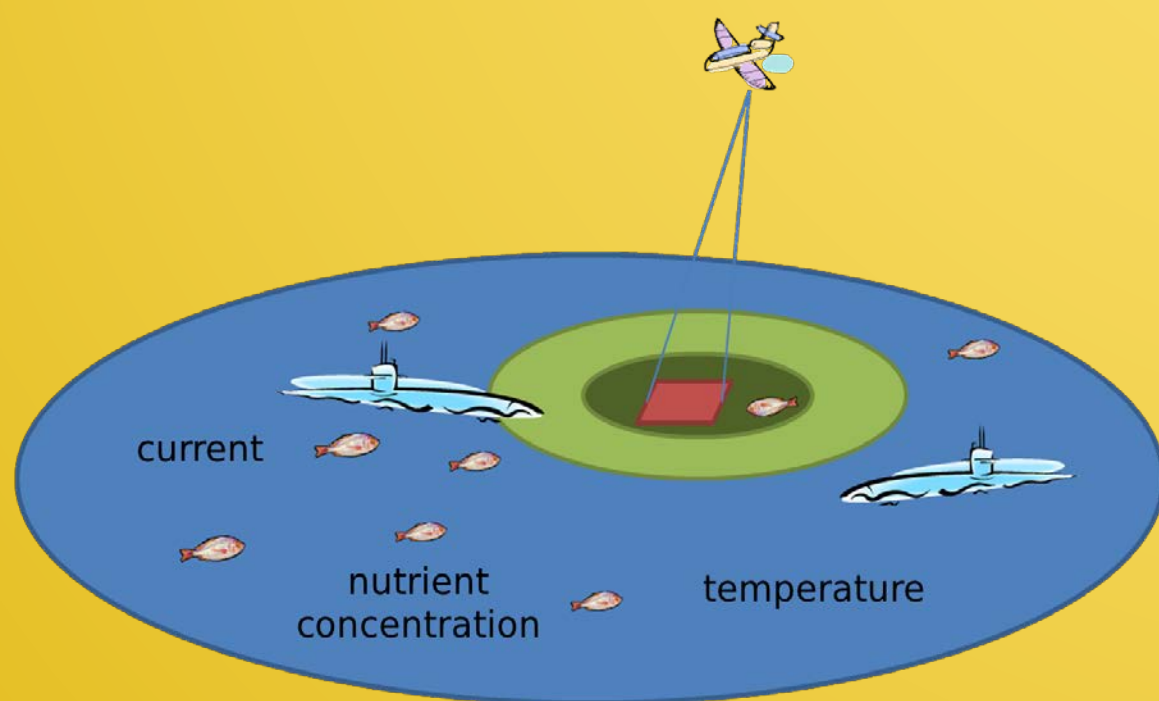
### More Real-time Water Management

- At the right time
- At the right place
- With the right amount

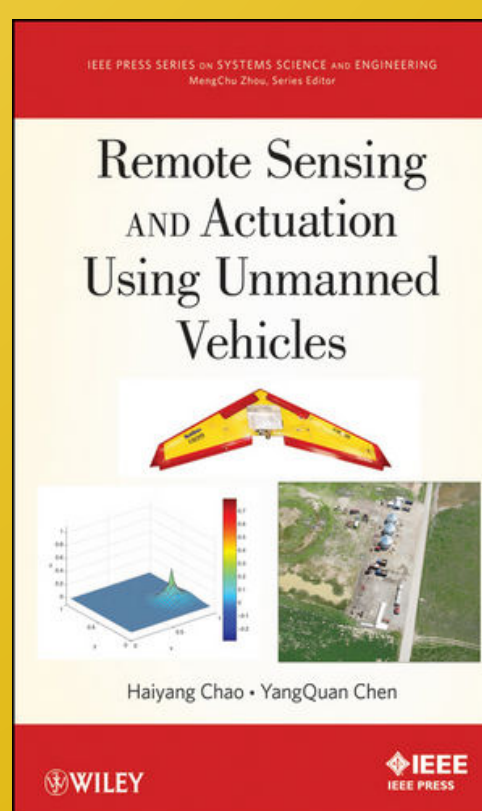
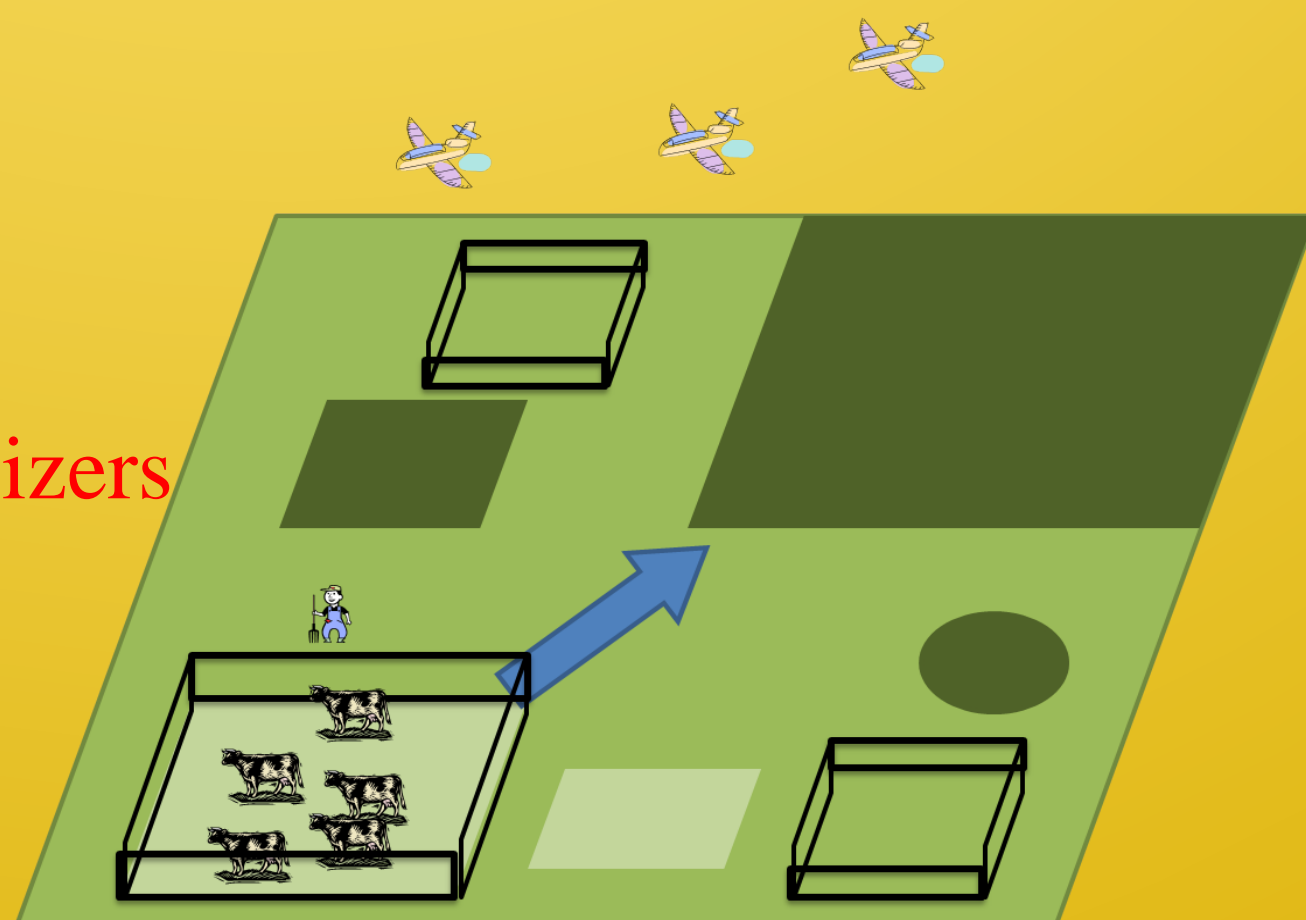


### Water Treatment Lagoon

- UAS-enabled CPS to create biofuel from waste
- UASs provide accurate remote sensing data



### Algal Bloom Tracking & Modeling



### Agriculture in 2100s

- when no more synthetic fertilizers available

#### Contact Information

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#### MESA Lab @ UCMerced Research Matters

- Water
- Energy
- Environment
- Precision Agriculture