

# Curriculum Vitae

of

Paul Craig Kupke

20 Damian Cres  
Kearney Springs, Qld 4350

Ph: (07) 4636 5632  
W: (07) 4698 7828  
Fax: (07) 4698 7989  
Email: [paul@sulman.com.au](mailto:paul@sulman.com.au)

## MEMBERSHIP:

- Affiliate to the National Centre of Engineering in Agriculture  
University of Southern Queensland, Toowoomba
- Member of the American Society of Agricultural Engineers

## TERTIARY EDUCATION:

- **Bachelor of Agricultural Engineering (First Class Honours)**  
University of Southern Queensland  
Toowoomba, QLD 4350
- **University of Nebraska (Undergraduate)**  
Faculty of Agricultural and Biological Systems Engineering  
Lincoln, Nebraska, USA
- **University of Adelaide (Undergraduate)**  
Faculty of Engineering  
Adelaide, SA 5005

## EXPERIENCE:

***Position: Design and Test Engineer***

***Company: Biosystems Engineering Pty. Ltd (ABN: 78 219 454 938)***

**March 2004 – Current**

- **Machinery Testing services in the Agricultural Industry, specialising in the following areas:**
  - Component specification analysis
  - Accident analysis
  - Structural failure
  - System failure
  - Data acquisition (Stress, Strain, Pressure, Velocity and Temperature)

Reports presented with the following optional aids:

- 3D computer solid modelling
  - 3D computer animation
  - Solid scale modelling
  - Digital video
  - Digital photography
- **Consulting Engineer to the National Centre for Engineering in Agriculture (NCEA).**
    - Design, manufacture and testing of a Hardwood Chipper for Dr Harry Harris (University of Southern Queensland and RIRDC).
    - Design, develop and manufacture a fully automatic applicator to disperse 'Nalco' 'WaterSavr' product to limit surface evaporation in water.

- **Consulting Engineer to the Department of Primary Industries, Toowoomba and Warwick**
  - Design, develop and manufacture a CO<sub>2</sub> measurement chamber.
  - Design, develop and manufacture a Hand Held plot harvester
  
- **Consulting Engineer to 'Saltbush Systems' Pty Ltd.**
  - Design, develop and test a one pass Saltbush planting machine.
  - Design, develop and test specialised machinery for on-farm saltbush nursery.
  
- **Consulting Engineer to 'Kenro Metal Services', Toowoomba**
  - 3D modelling and supply of manufacturing plans.
  - Structural analysis of general components.
  
- **Consulting Engineer to 'Namoi Valley Implements', Narrabri**
  - Supply of planter components.
  - Design, develop and test a parallelogram planting tine.
  - Supply manufacturing plans for the 'Bio-Blade' Disc Planter.
  - Supply graphical database for the 'Bio-Blade' Disc Planter.
  - Design a seeding boot for the 'Bio-Blade' Disc Planter.
  - Design and develop a precision disc planting unit.
  - Design and develop a patented parallelogram/breakout precision planting tine.
  
- **Contract writing for the Kondinin Group's 'Farming Ahead' magazine, Perth**
  - Machinery evaluations and previews.
  
- **Consulting Engineer to 'Bourgault Australia', Perth**
  - Design, develop and test a hydraulic tine
  - Supply Hydraulic tine components
  
- **Consulting Engineer to 'Croplands Australia', Toowoomba**
  - Modify and Develop a Controlled Traffic Axle kit

***Position: Labourer (Part Time)***  
***Company: Skilled Engineering***

**January 2001-2003**

- Grain inspector for AQIS
- Cleaner, Bunker operator, and general labourer for AusBulk Ltd.
- Press operator for Henderson Automotive Ltd.
- Other general labour

***Position: Assistant (Part Time)***  
***Company: Family Property***

**January 1990 – 1999**

- Assist in the design, construction and maintenance of machinery required for grazing operations.
- General animal husbandry duties involving cattle, pork, sheep and fat lamb production.
- Hay production and milling of feedlot rations for sheep and pigs.
- Assist in the design, construction of field bins.
- Operator/assistant of portable sheep plunge dipping service.
- Assist in the foundations, concrete and construction of a 80' x 60' shed

## **PUBLICATIONS:**

Kupke P., "Development of a folding mechanism for an 18m Scaribar" Honours Thesis Report 2003.