PROPOSITIONS

belonging to the thesis

QUANTUM OPTICAL CONTROL OF DONOR-BOUND ELECTRON SPINS IN GAAS ${\bf Maksym~Sladkov}$

- 1. The one and only way to enjoy phd research is to work in a team.
- 2. The electron-nuclear spin feedback in optically driven donor-bound electron spins system is less pronounced than that in self-assembled quantum dots.

Chapter 5 of this thesis

3. The use of an optical resonant Raman scheme allows the generation and time-resolved probing of the coherent dark state of a donor-bound electron spin ensemble.

Chapter 6

4. Polarization preserving fibers do preserve polarization even in the presence of a strong magnetic field.

Chapter 4

- 5. False compliments that are demanded by the rules of etiquette devalue the truly deserved ones.
- 6. The general perception about "russian english" is that it is full of strong consonants. In truth, the problem is the inability in pronouncing a rich zoo of vowels.
- 7. To sack a politician because he/she was caught saying something inappropriate in private is as naive as to vote for him/her because of one's beliefs in his/her official campaign.
- 8. If "Catch 22" was written now it could have easily been based on the dutch immigration law.

These propositions are considered opposable and defendable and as such have been approved by the supervisor prof. Caspar H. van der Wal.

Eindhoven, January 2011