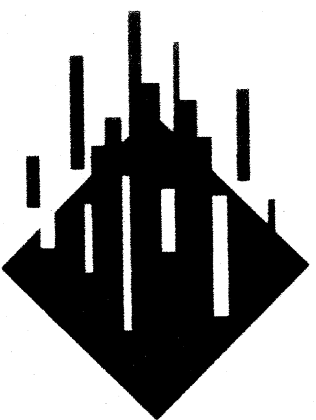


Ann Wilson and Christina Paraskeva

Domino

**GPC and LC Transform of Nitrocellulose Based
Inkjet Inks**



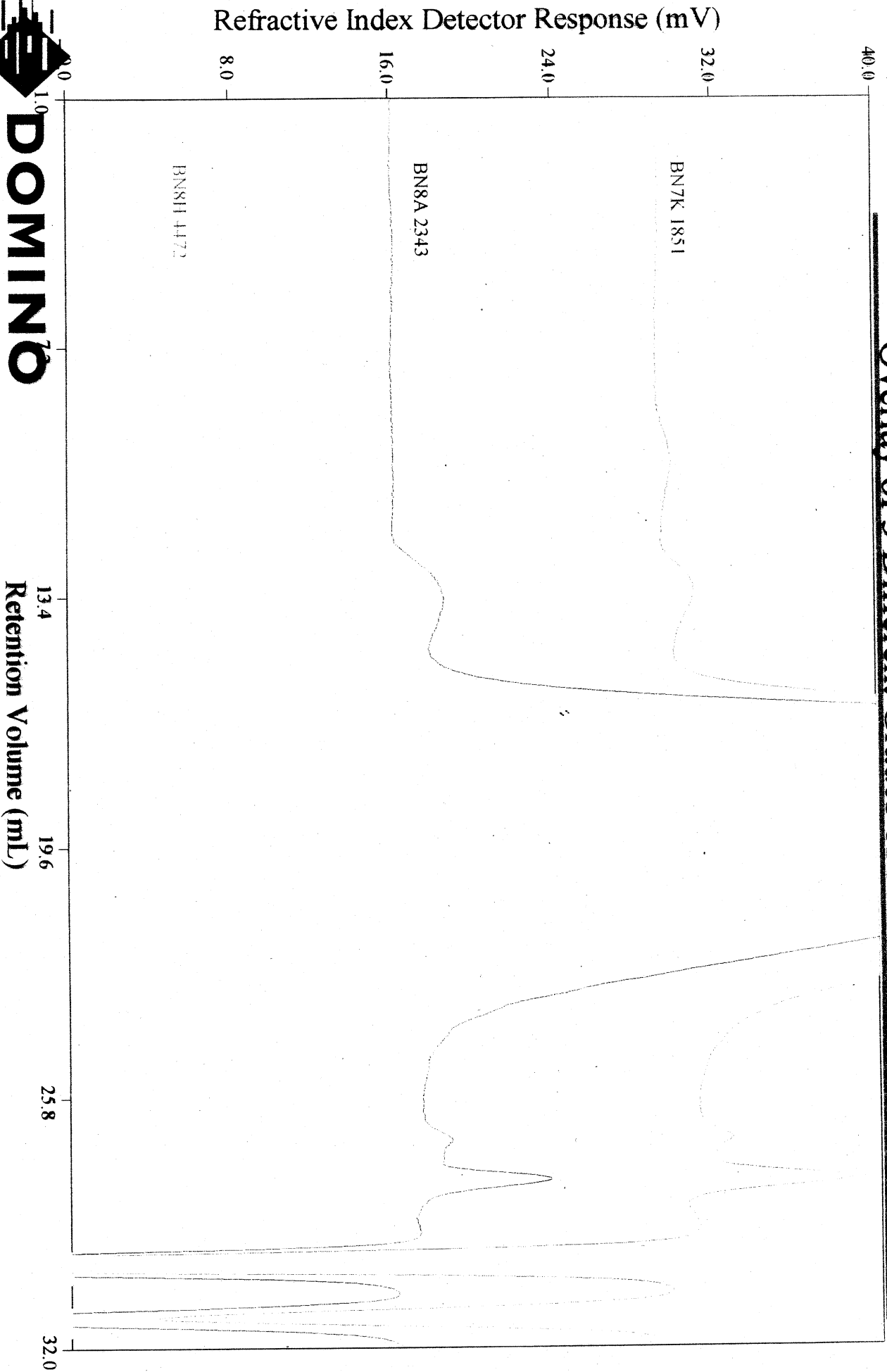
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GPC and LC Transform of Nitrocellulose Based Inkjet Inks

Tuesday 13th February 2001

Ann Wilson and Christina Paraskeva

Overlay of 3 Different Grades of Nitrocellulose



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Retention Volume (mL)

GPC of Nitrocellulose

- ◆ Nitrocellulose used as a binder in one of our inks.
- ◆ The RI detector gave different profile for 3 different grades of NC
- ◆ Calculated M_w depended on where integration limits placed
- ◆ All work carried out in 100% MEK with approx 1.5% solutions
- ◆ LS detector showed interesting “fast eluting” peaks



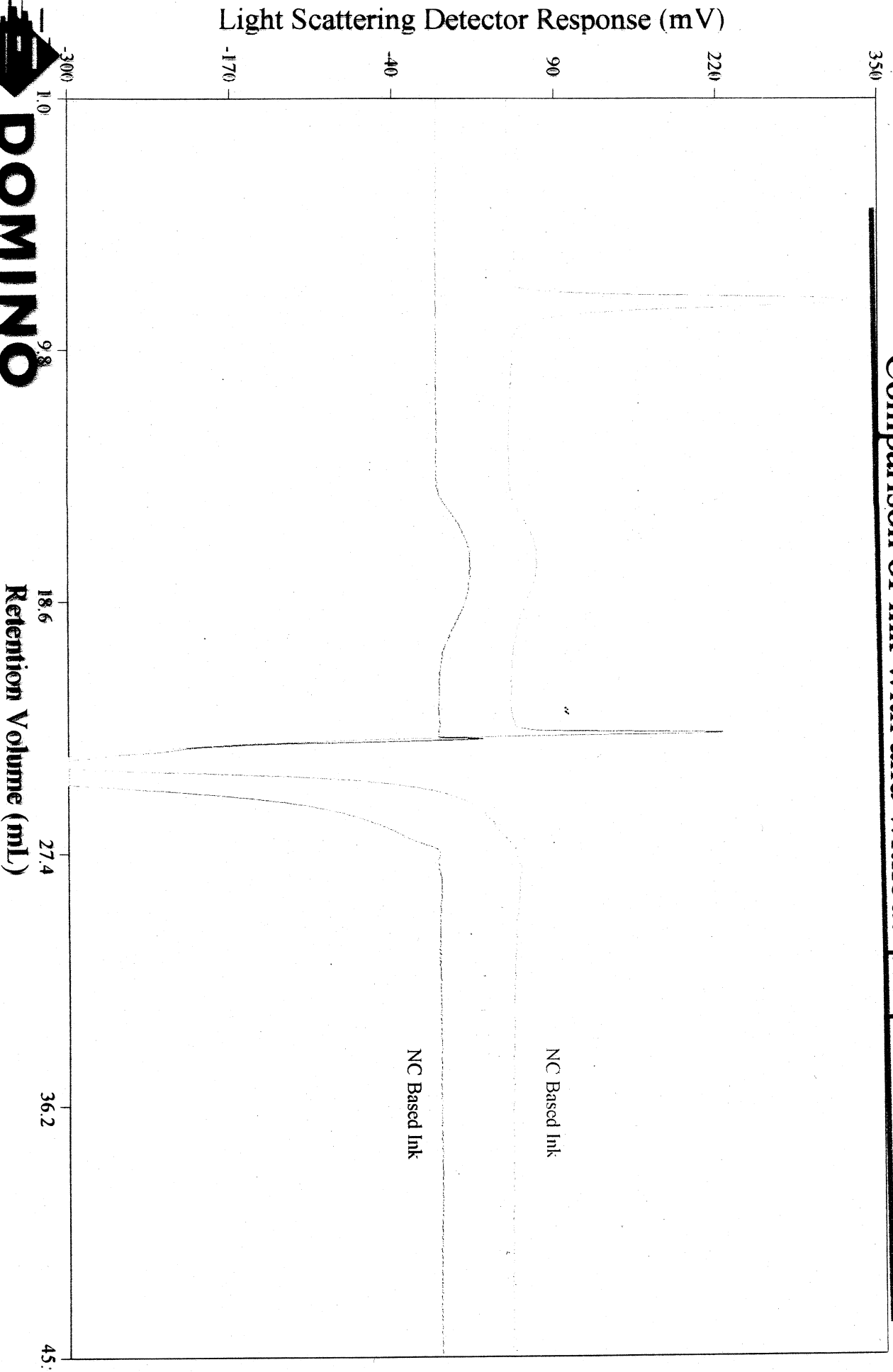
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GPC of Nitrocellulose based Inks

- ◆ LS detector showed “fast eluting” peak in NC based inks, but not all the time!
- ◆ LC transform system acquired from Viscotek
- ◆ LC transform successful in identifying these “pre peaks”
- ◆ Conclusion proposed was an interaction with other components of the ink



Comparison of ink with and without 'pre-peak'



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Retention Volume (mL)