

ANEXOS

1. Espectros FT- IR:

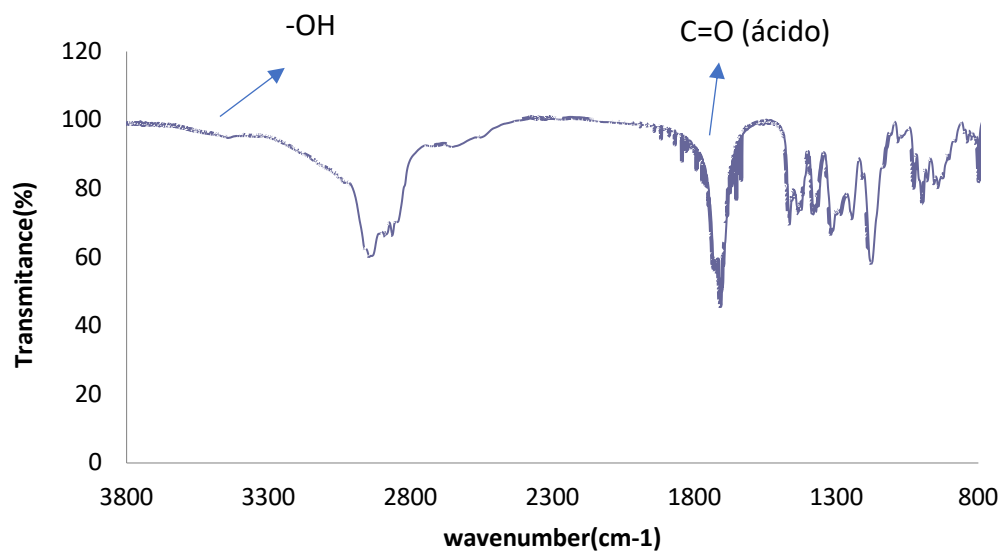


Figura 1: Espectro FITR (KBr) reacción Az [10]-CHS

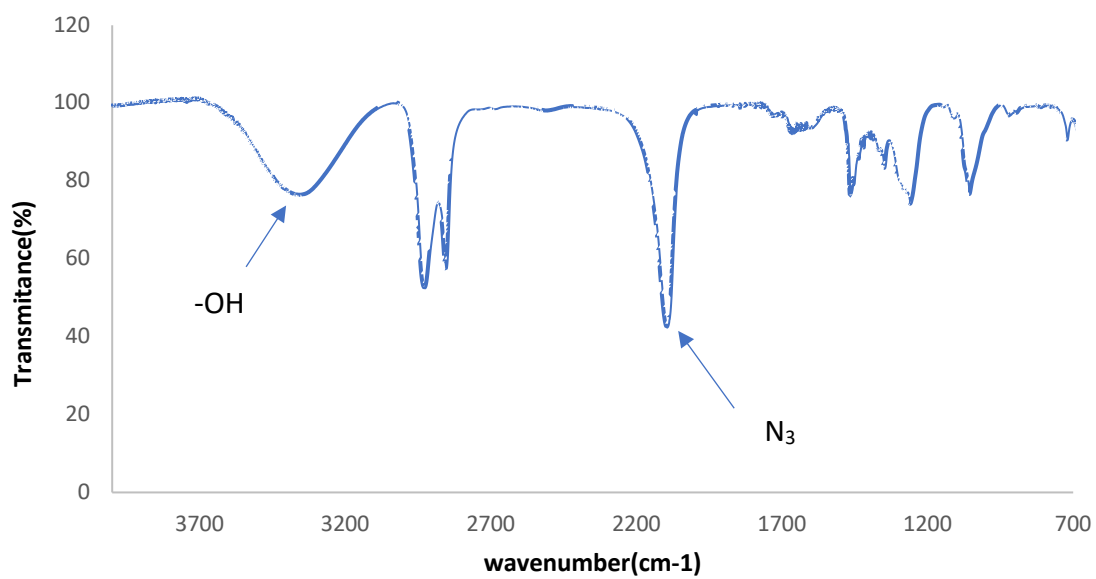


Figura 2: Espectro FITR (KBr) producto HO-Az[10]

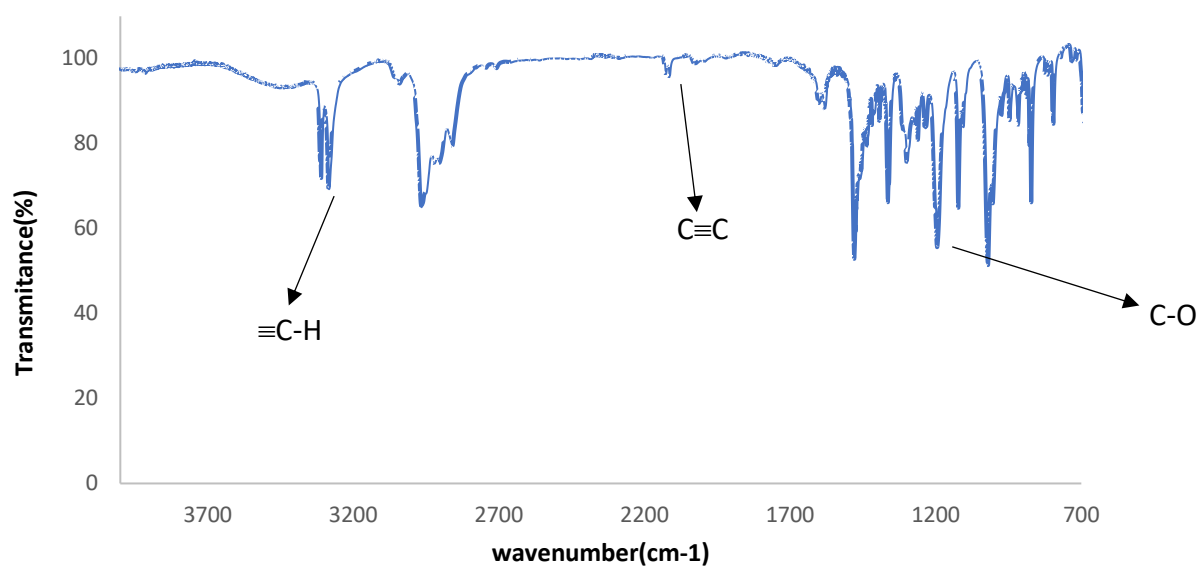


Figura 3: Espectro FITR (KBr) CALIX-[4]-4Alq

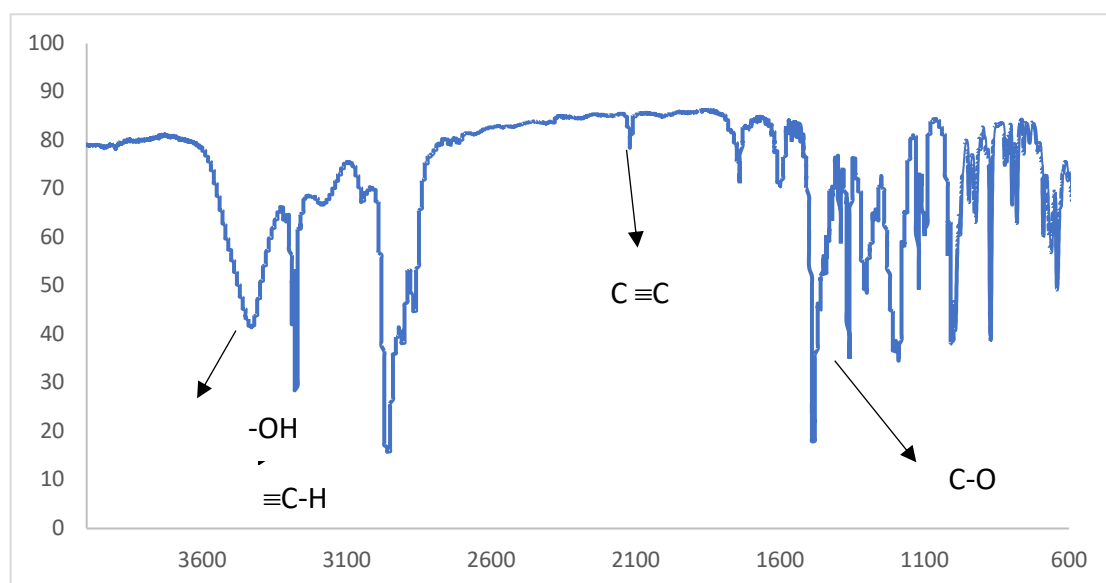


Figura 4: Espectro FITR (KBr) CALIX-[4]-2-Alq

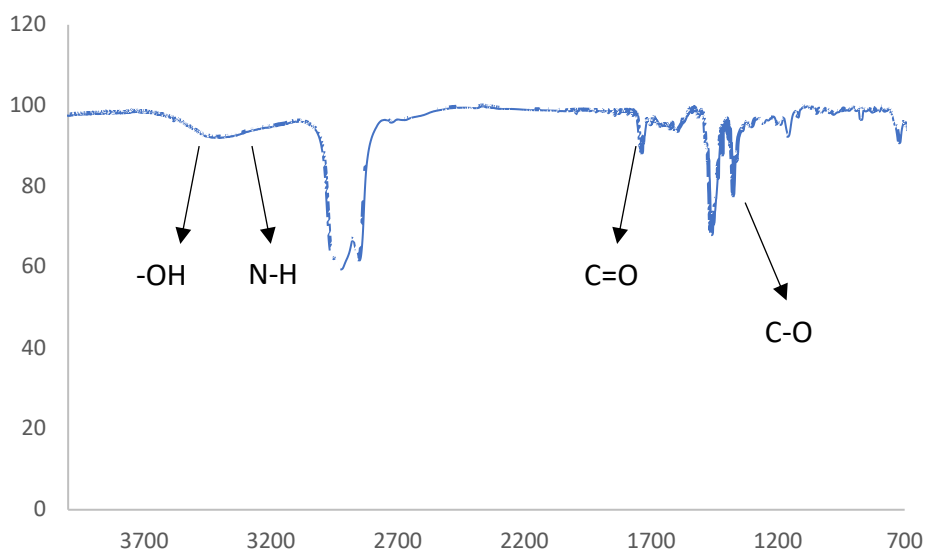


Figura 5: Espectro FITR (NaCl) CALIX-[4]- C(10)-2-CHS

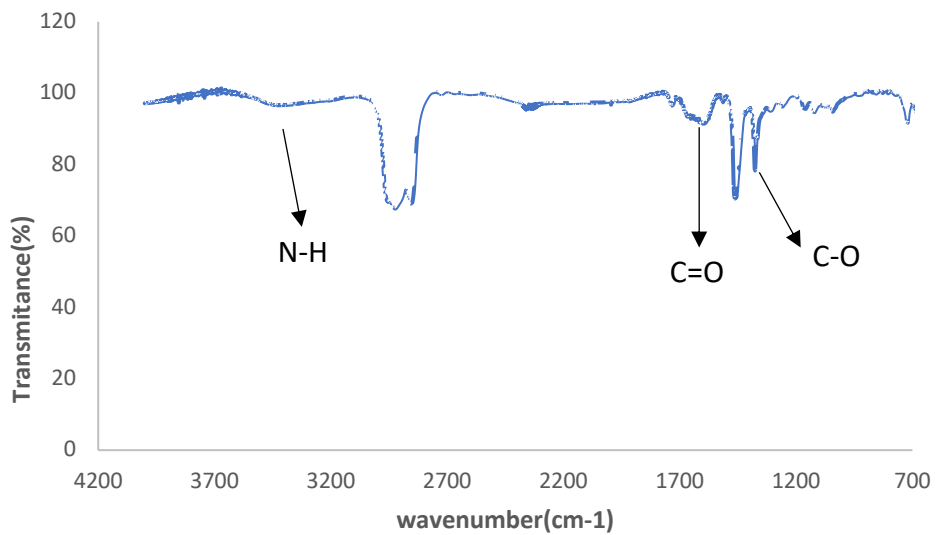


Figura 6: Espectro FITR (NaCl) Calix-[4]-C(10)-4-CHS

2. ^1H RMN, ^{13}C RMN:

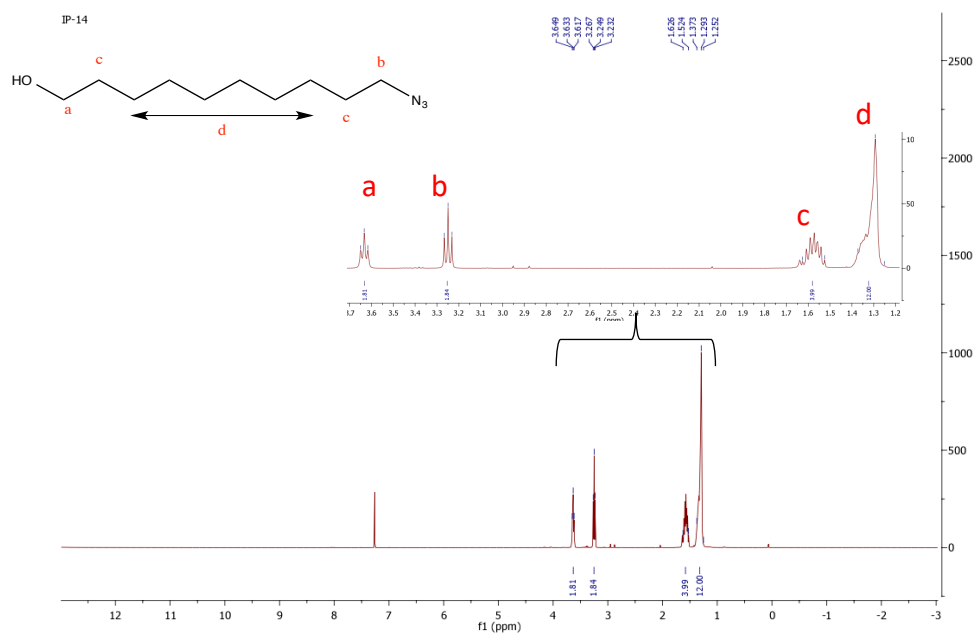


Figura 7: ^1H -RMN HO-Az-[10]

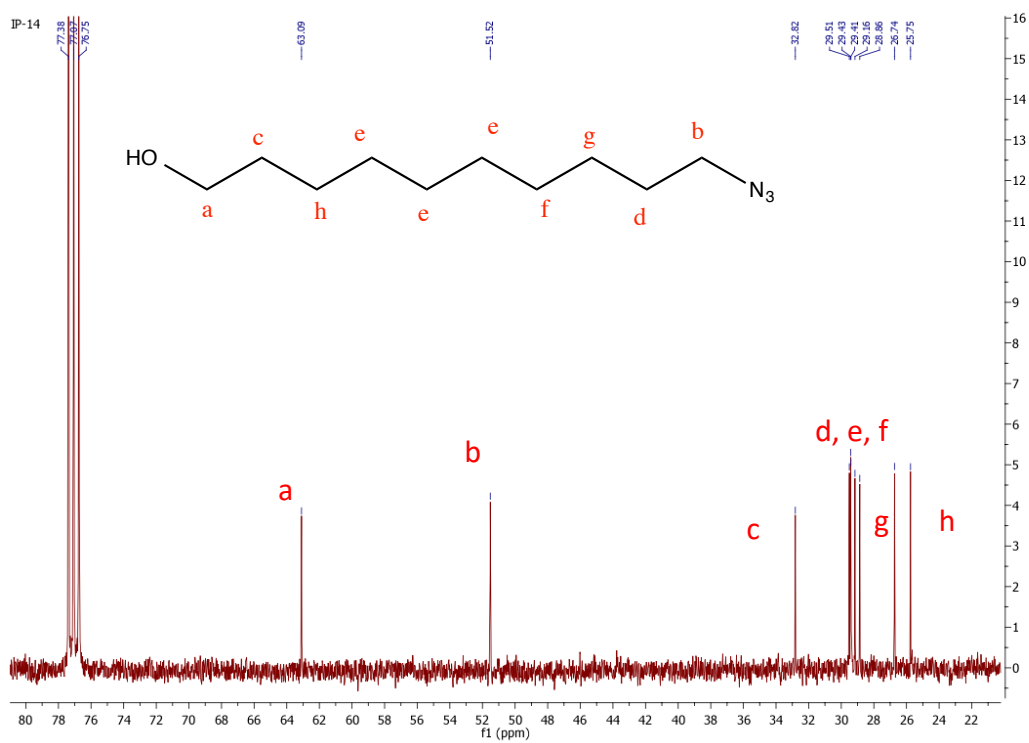


Figura 8: ^{13}C -RMN HO-Az-[10]

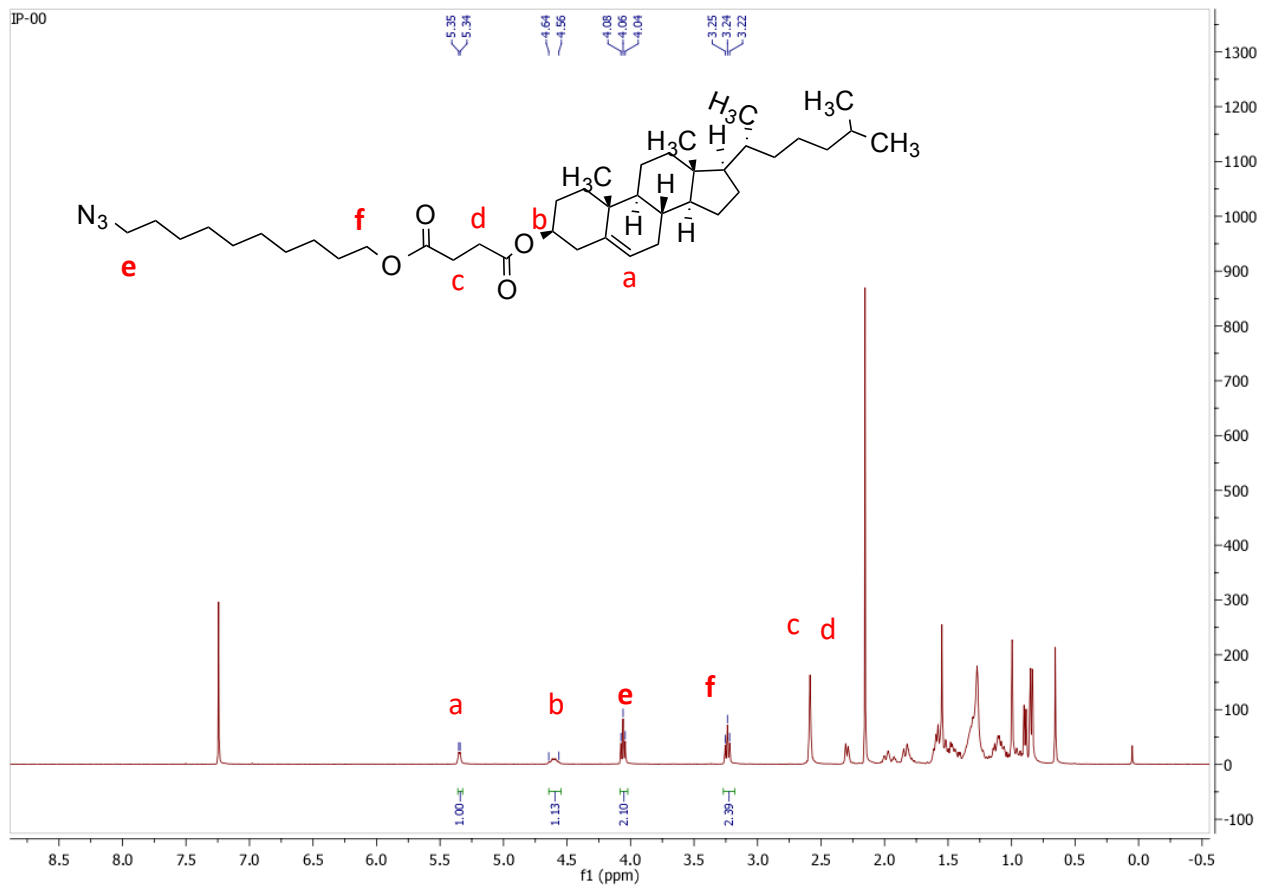


Figura 9: ^1H -RMN Az[10]-CHS

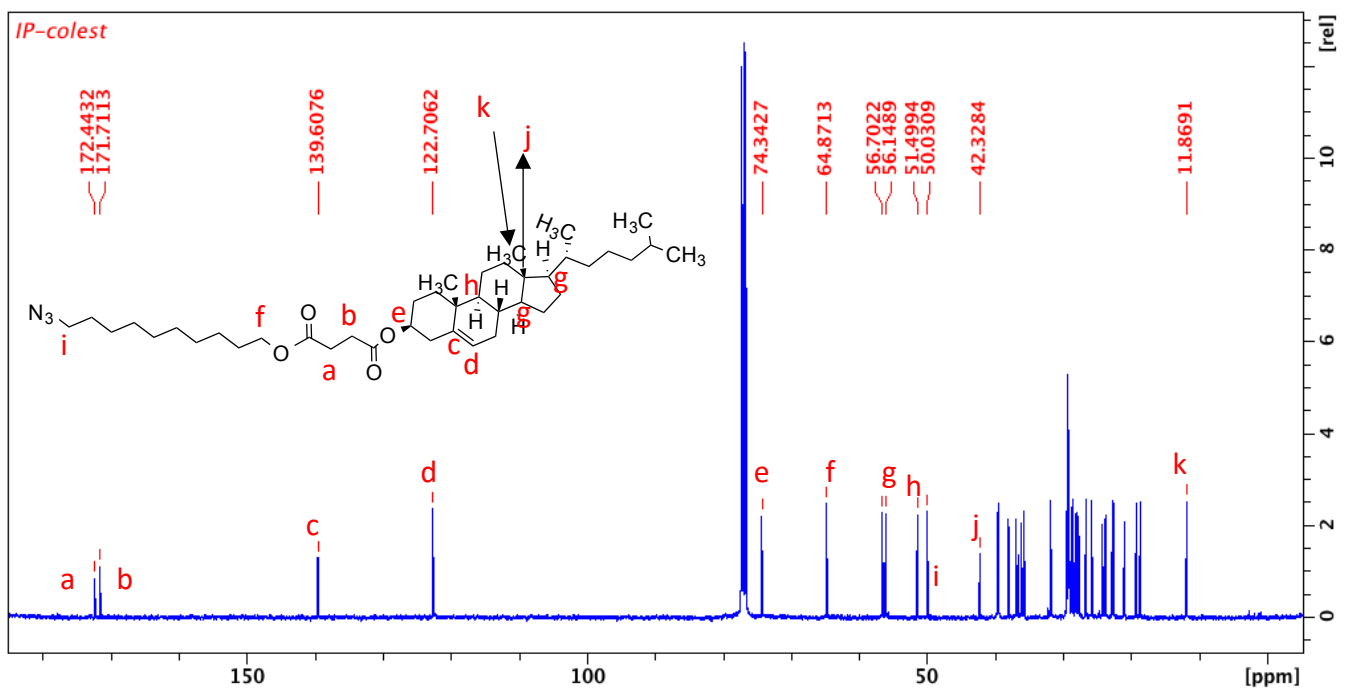


Figura 10: ^{13}C -RMN Az[10]-CHS

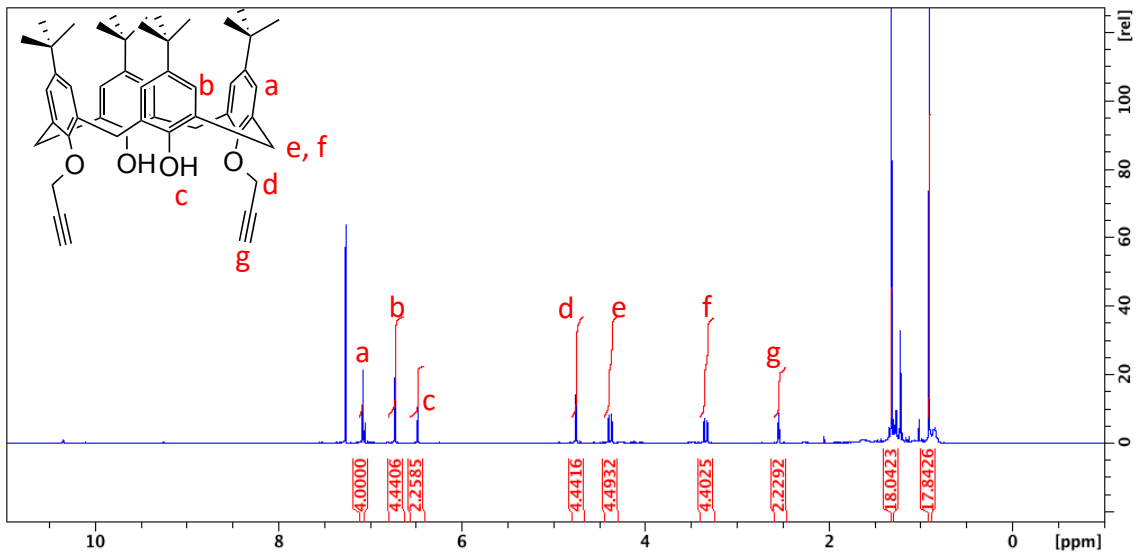


Figura 11: ¹H-RMN CALIX-[4]-2-Alq

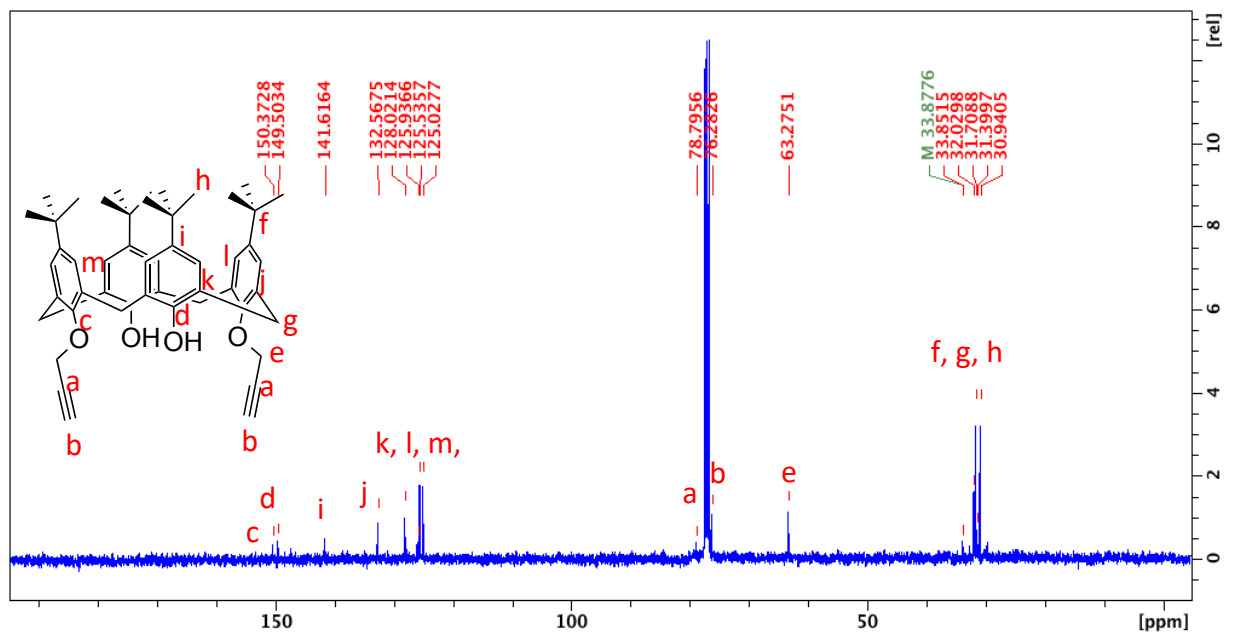


Figura 12: ¹³C-RMN CALIX-[4]-2-Alq

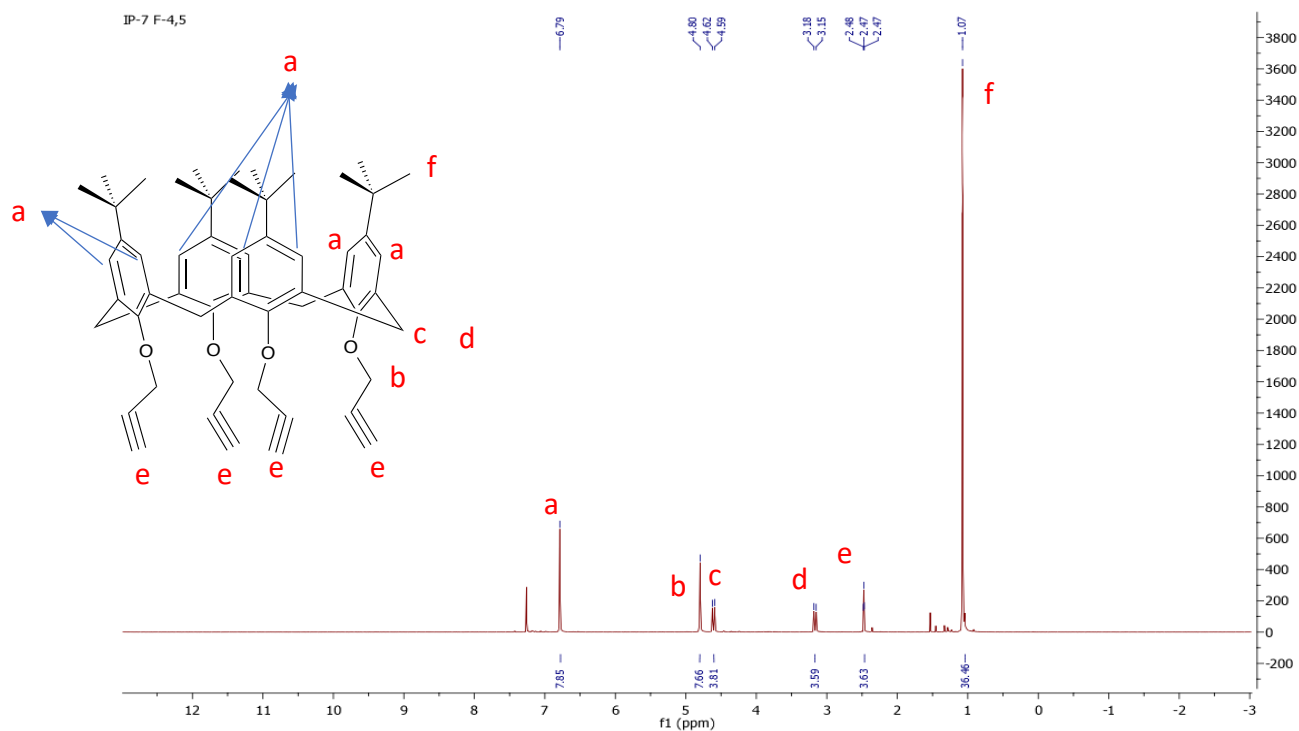


Figura 13: ^1H -RMN Calix-[4]-4-Alq

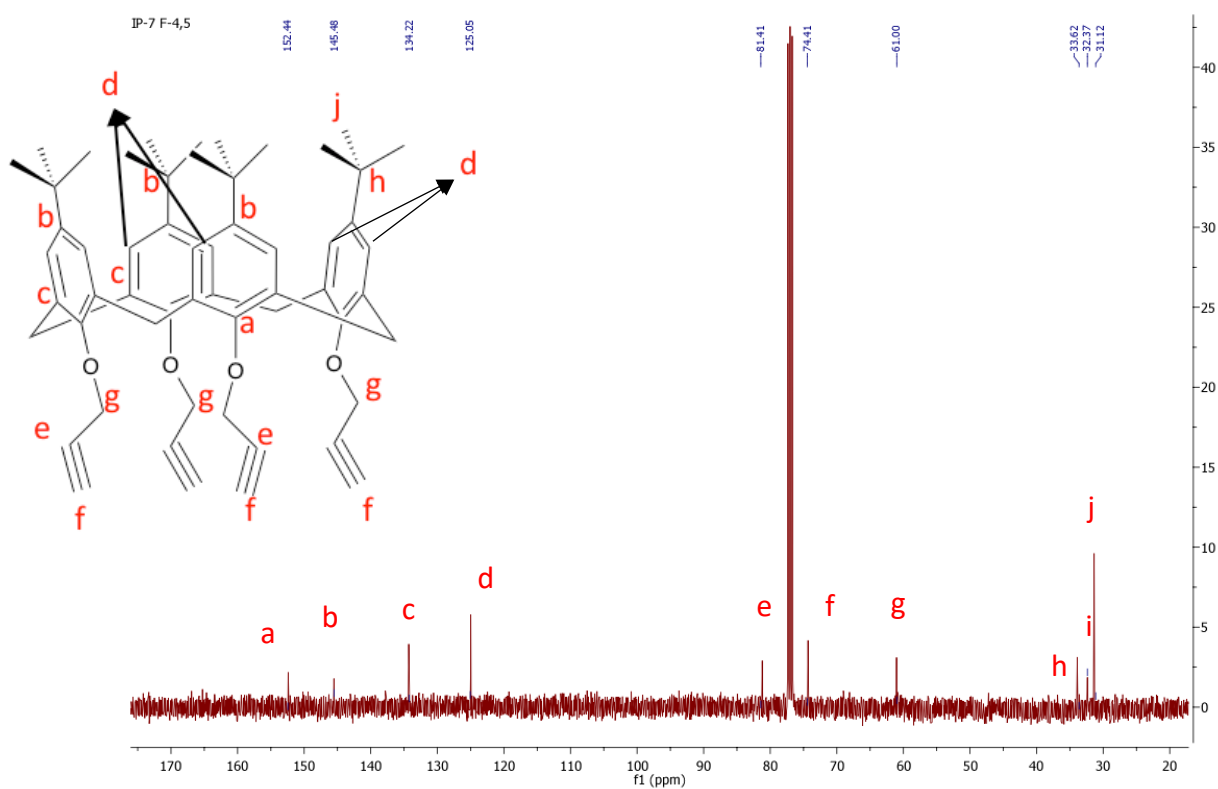


Figura 14: ^{13}C -RMN Calix-[4]-4-Alq

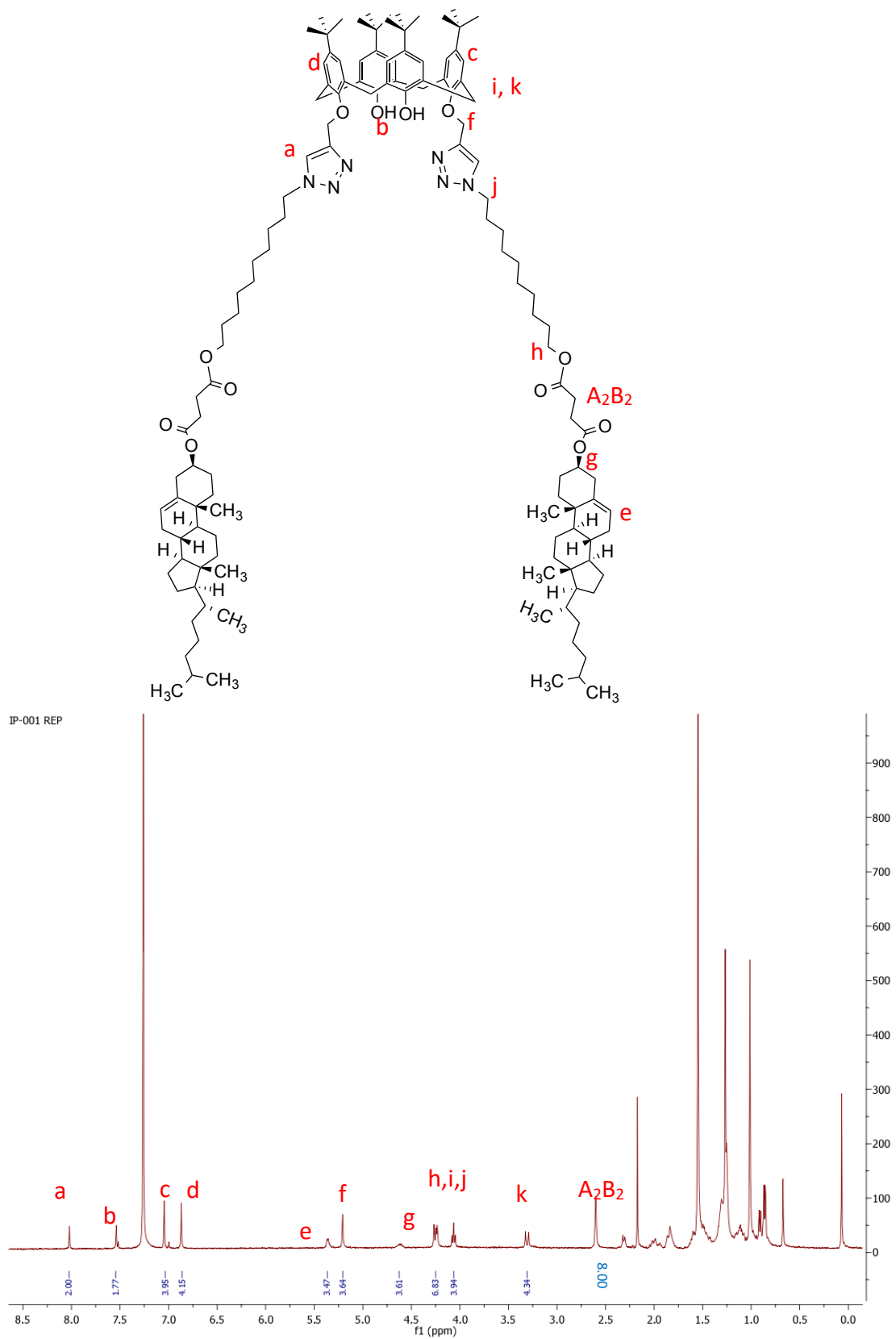


Figure 15: ^1H -RMN Calix-[4]-2-Alq

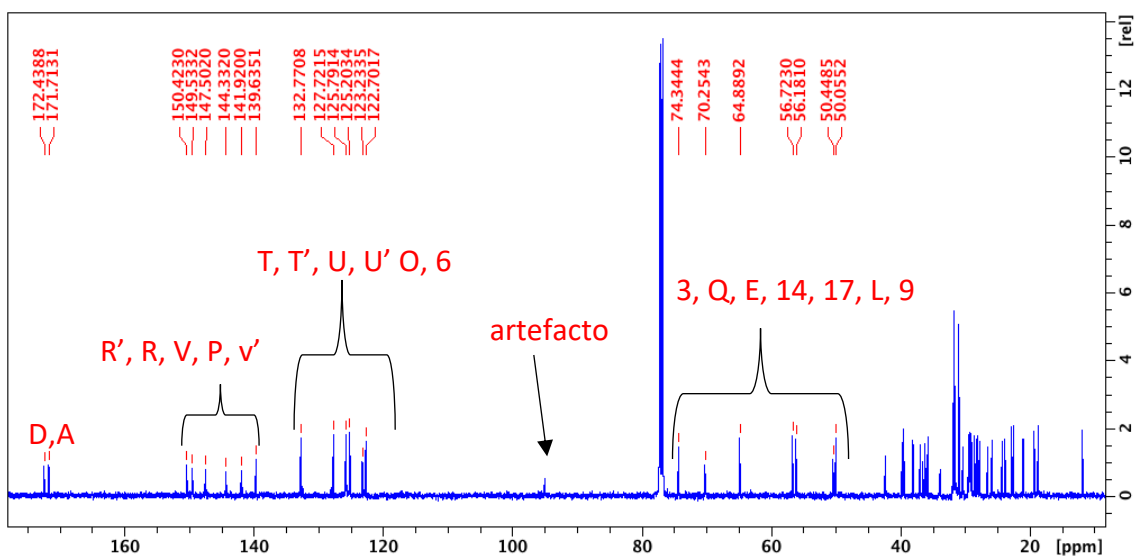
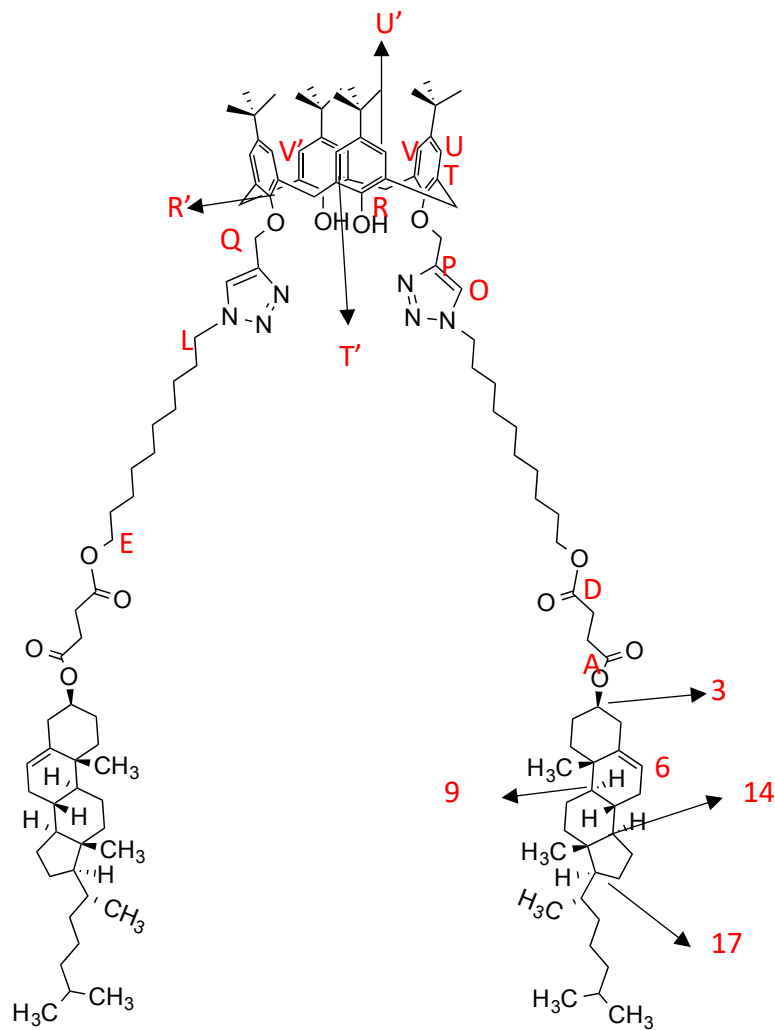


Figura 16: ^{13}C -RMN Calix-[4]-2-Alq

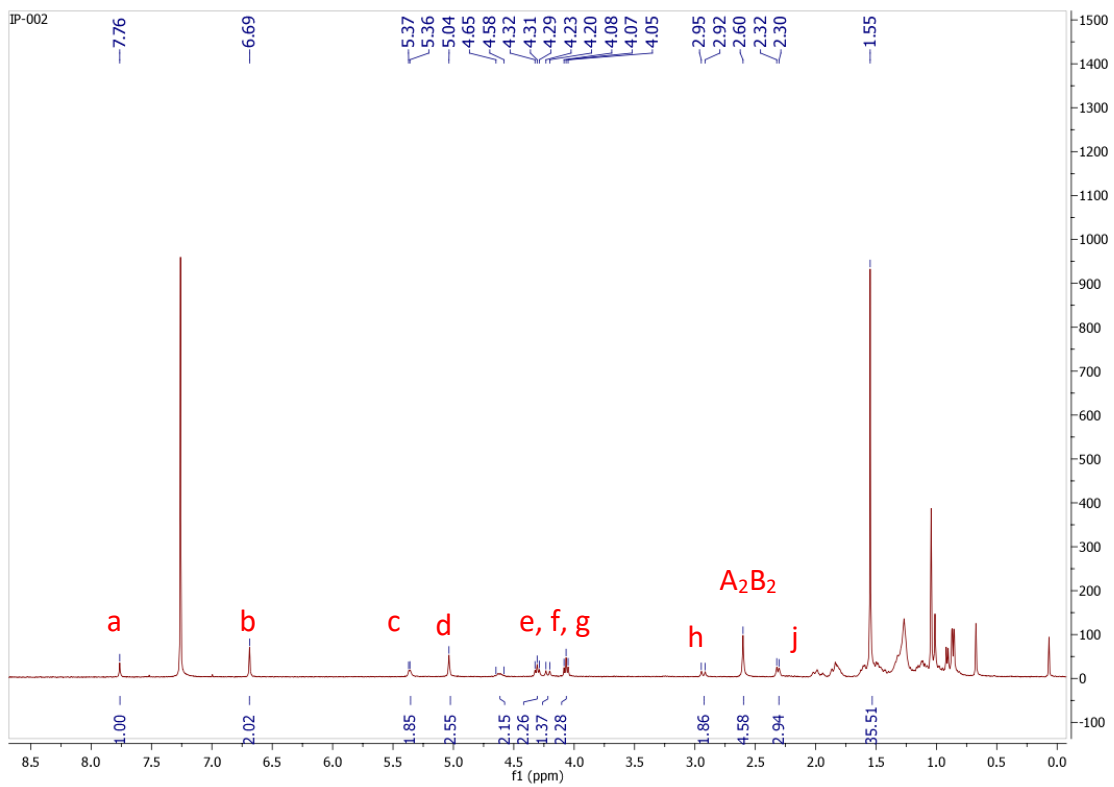
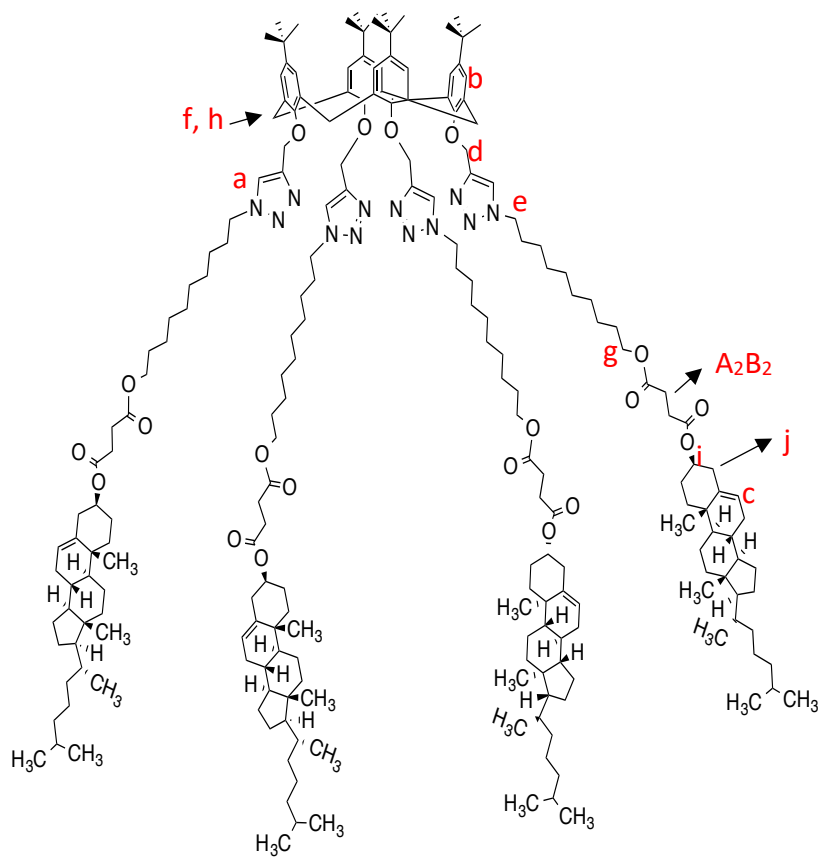


Figura 17: ¹H-RMN CALIX-[4]-C(10)-4-CHS

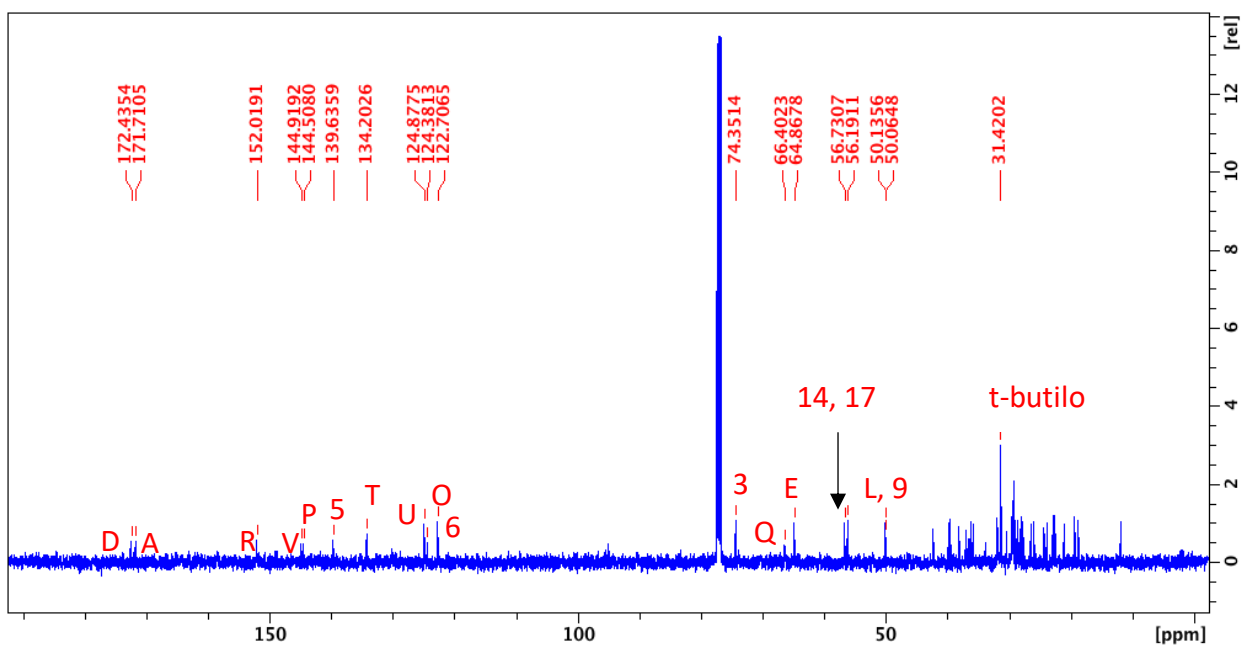
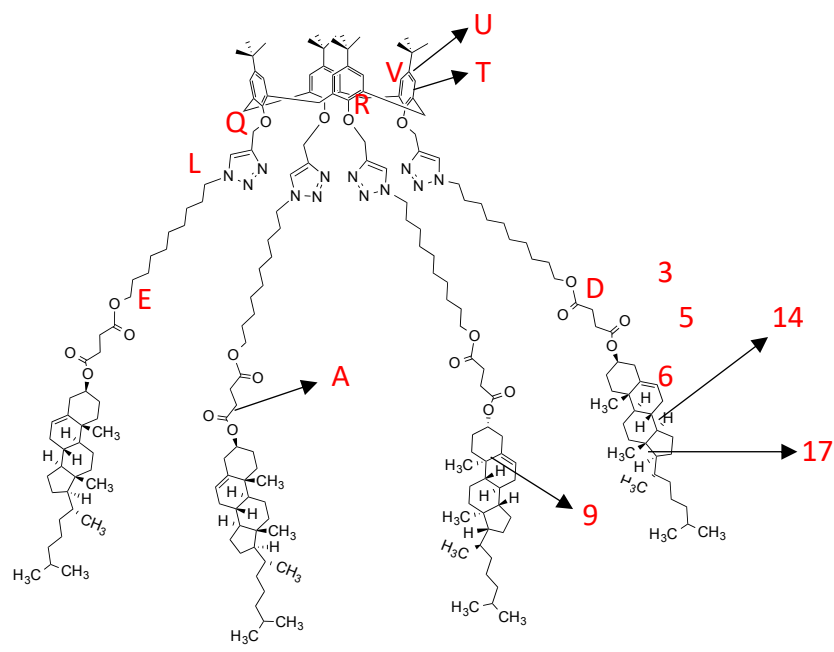


Figura 18: ^{13}C -RMN CALIX-[4]-C(10)-4-CHS

3. hsqc, hmbc, cosy:

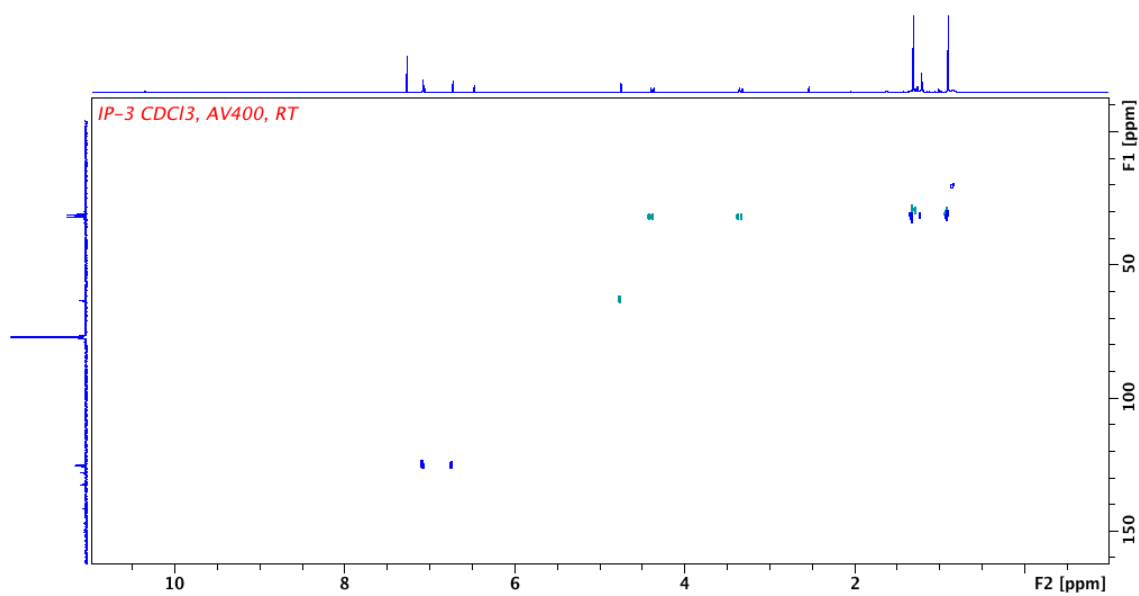


Figura 19: hsqc CALIX-[4]-2-Alq

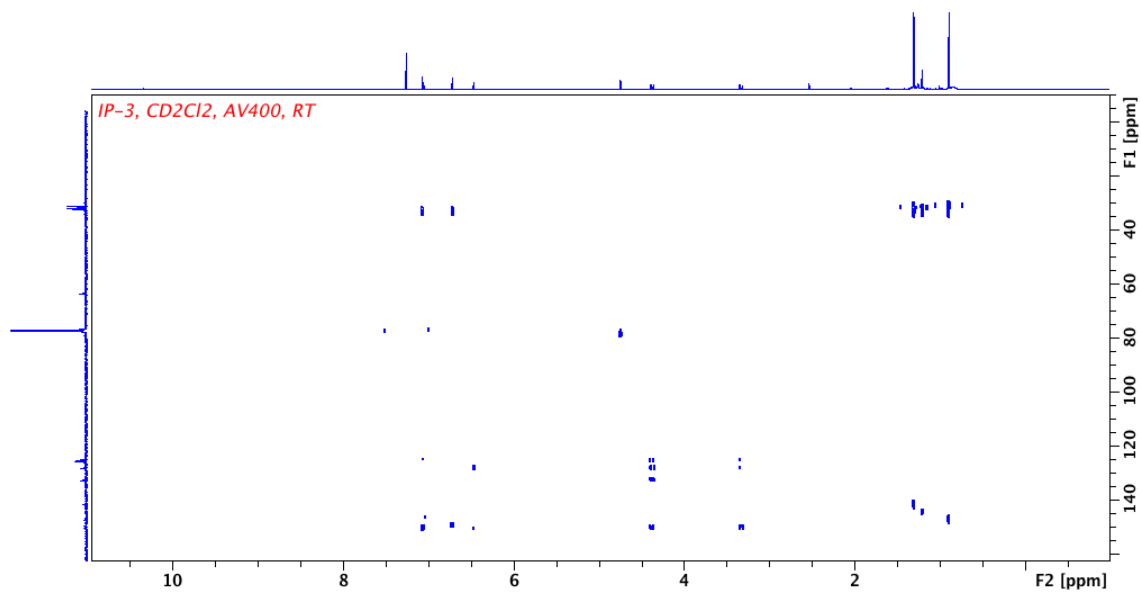


Figura 20: hmbc_CALIX-[4]-2-Alq

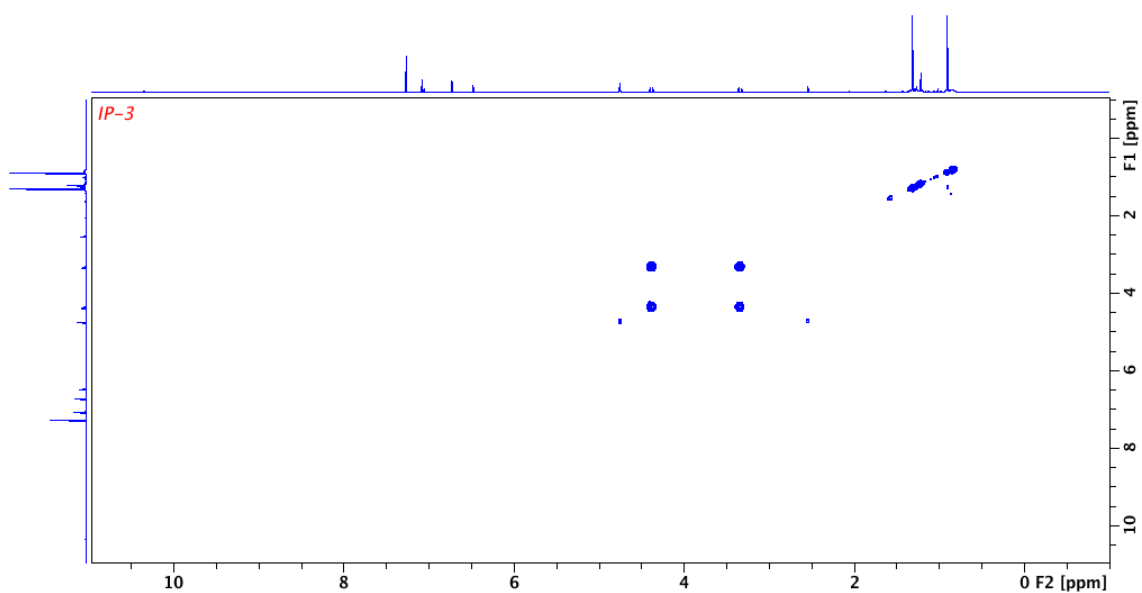


Figura 21: cosy CALIX-[4]-2-Alq

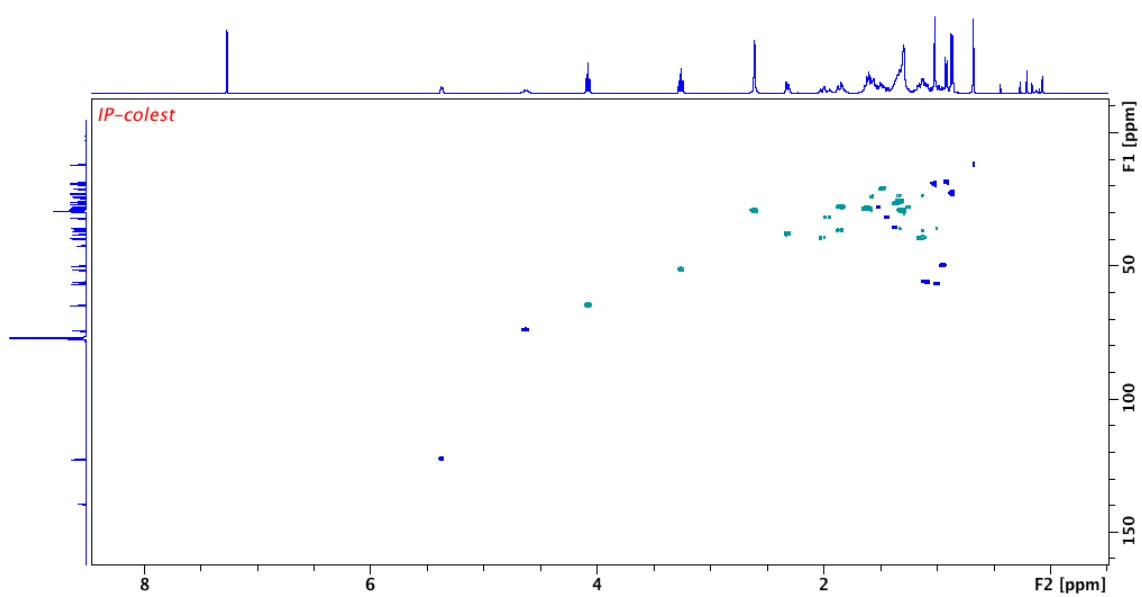


Figura 22: hsqc AZ-[10]-CHS

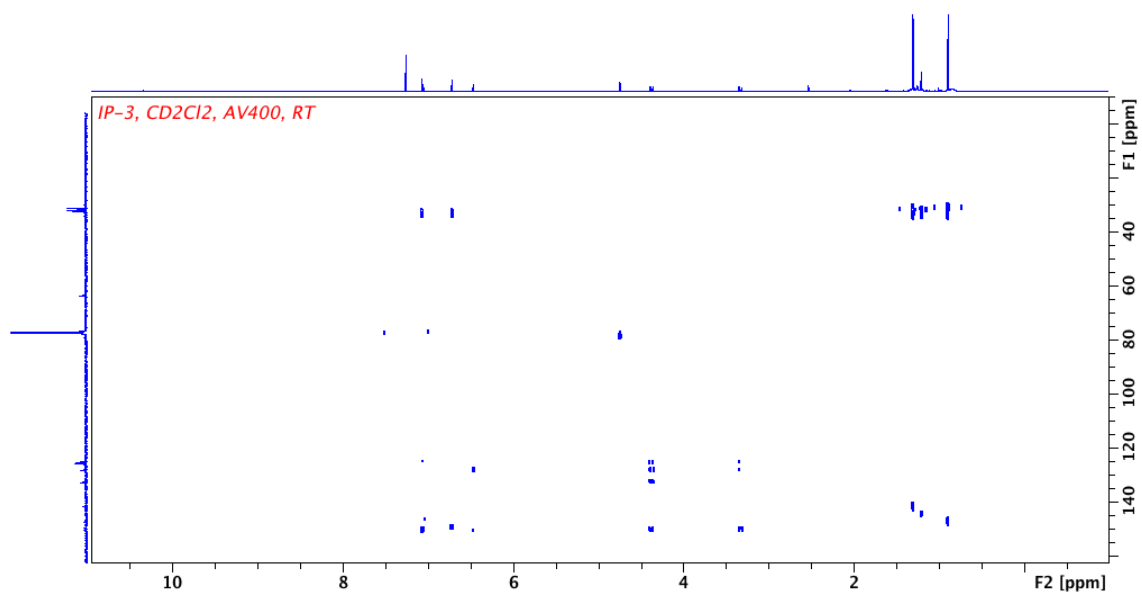


Figura 23: hmbc AZ-[10]-CHS

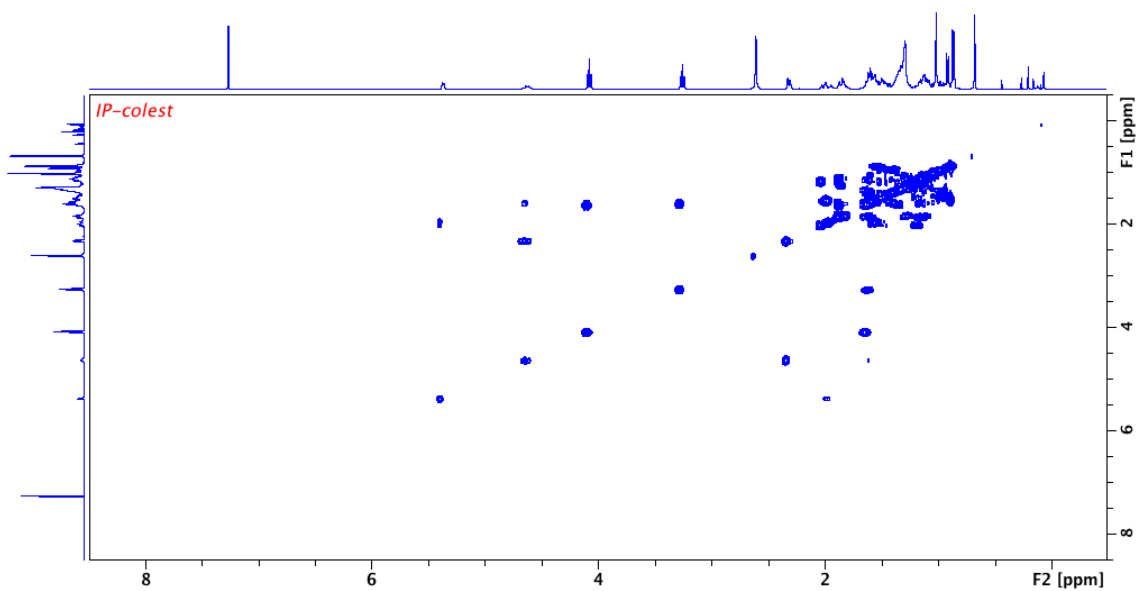


Figura 24 cosy AZ-[10]-CHS

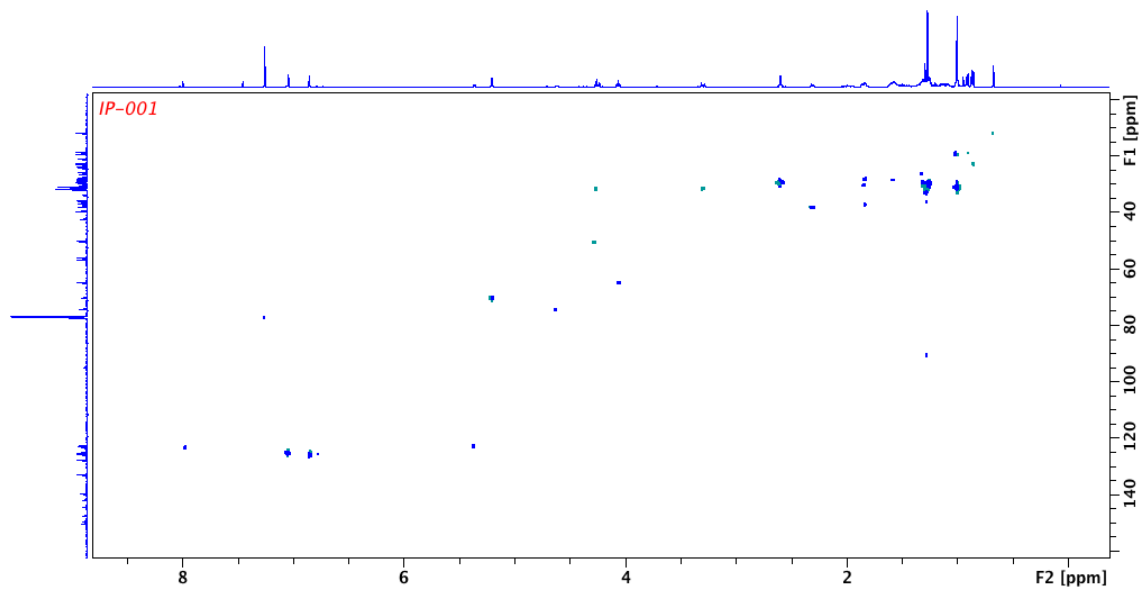


Figura 25: hsqc CALIX-[4]- C(10)-2-CHS

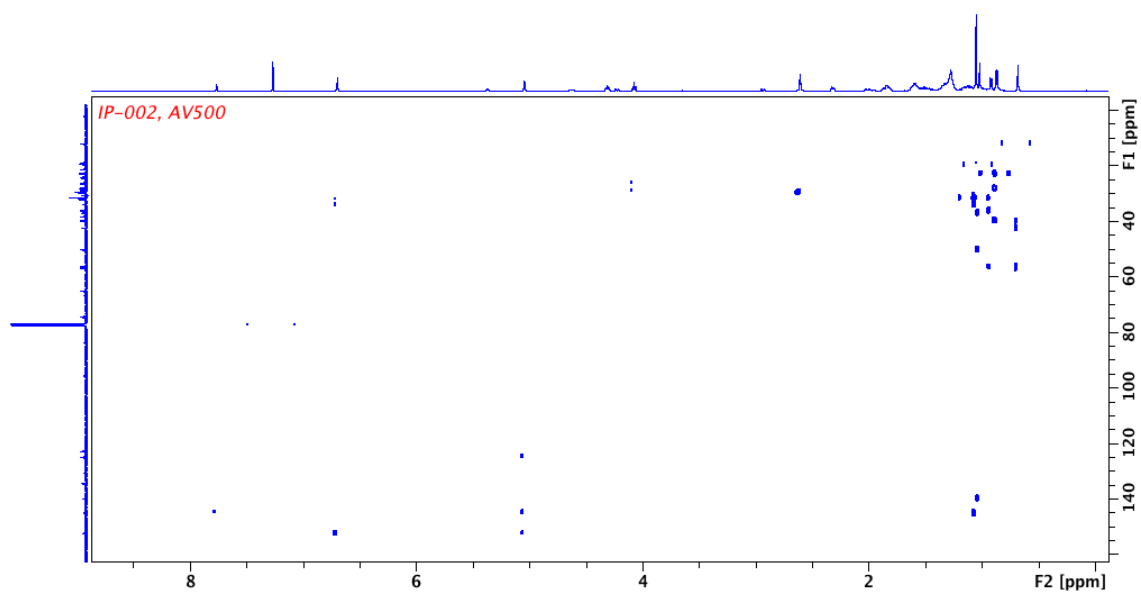


Figura 26: hmbc CALIX-[4]- C(10)-2-CHS

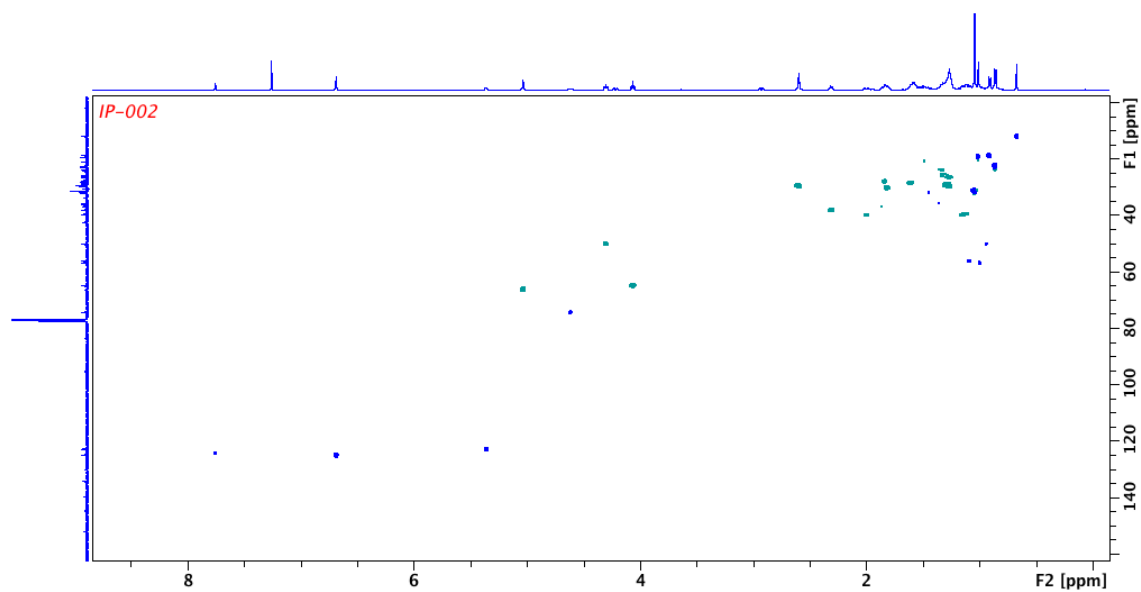


Figura 27: hsqc CALIX-[4]-C(10)-4-CHS

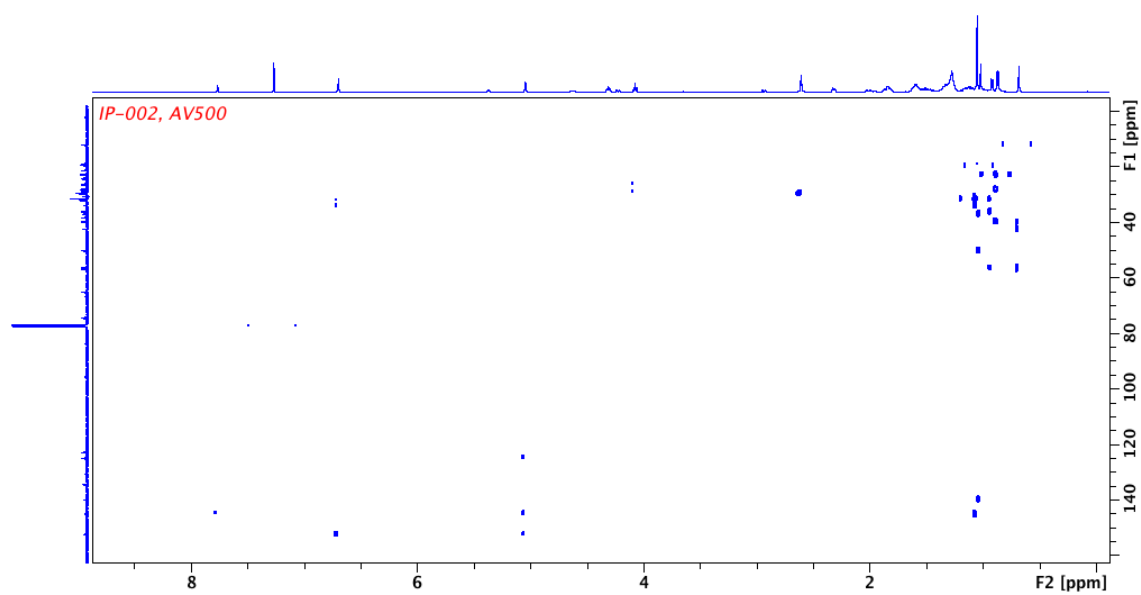
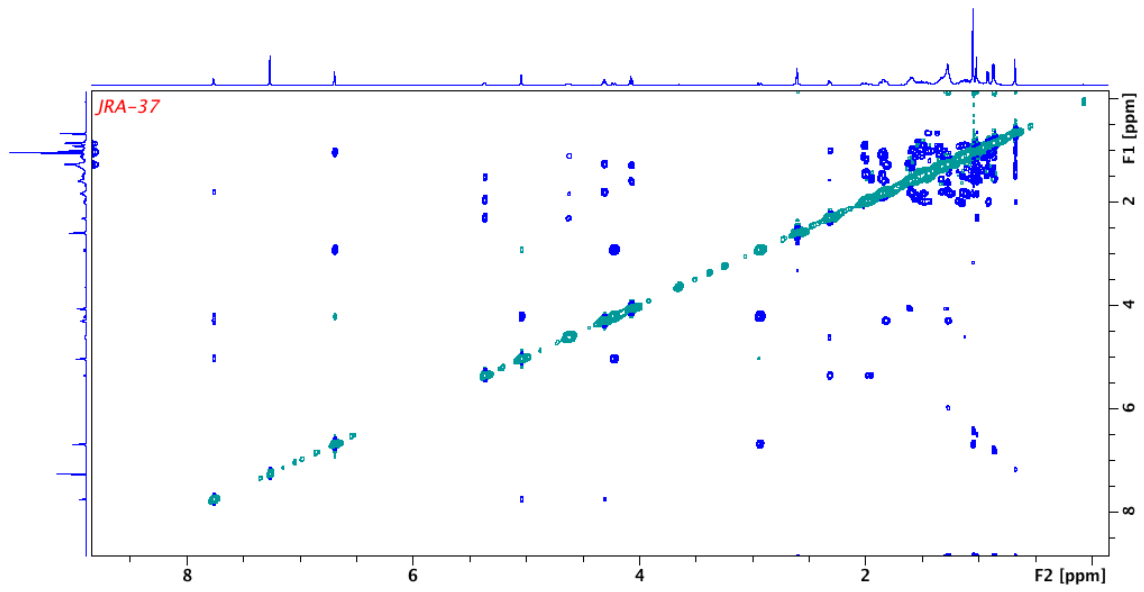


Figura 28: hmbc CALIX-[4]-C(10)-4-CHS



Figurav29: Roesy CALIX-[4]-C(10)-4-CHS

4. Espectrometría de Masas:

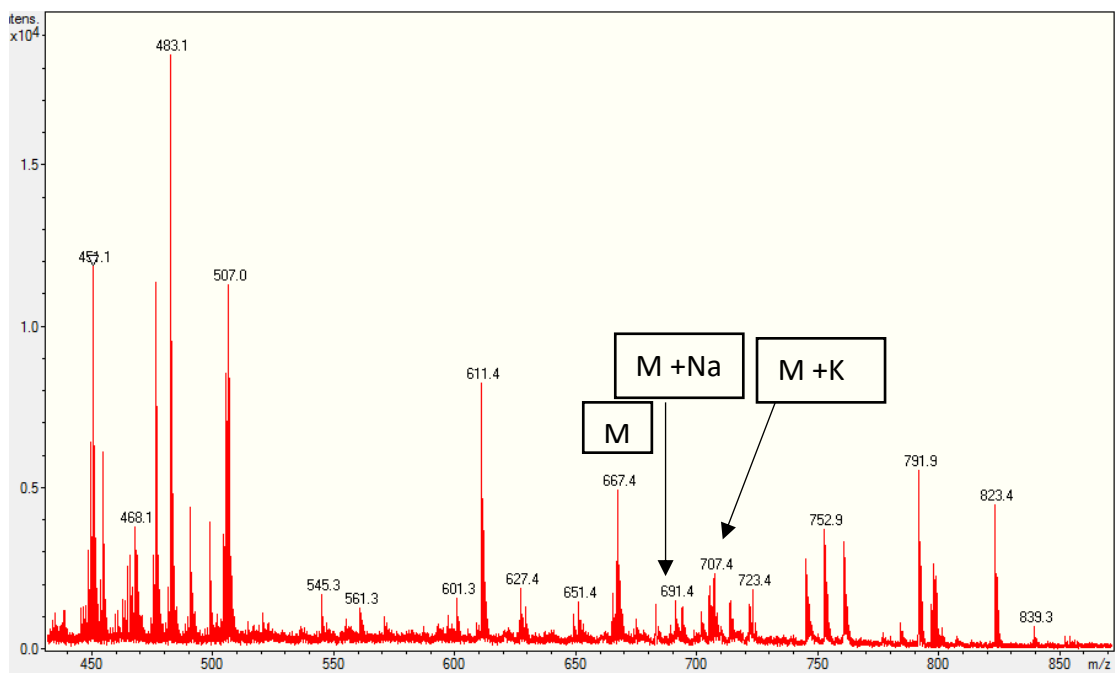


Figura 30: MS Az-[10]-CHS

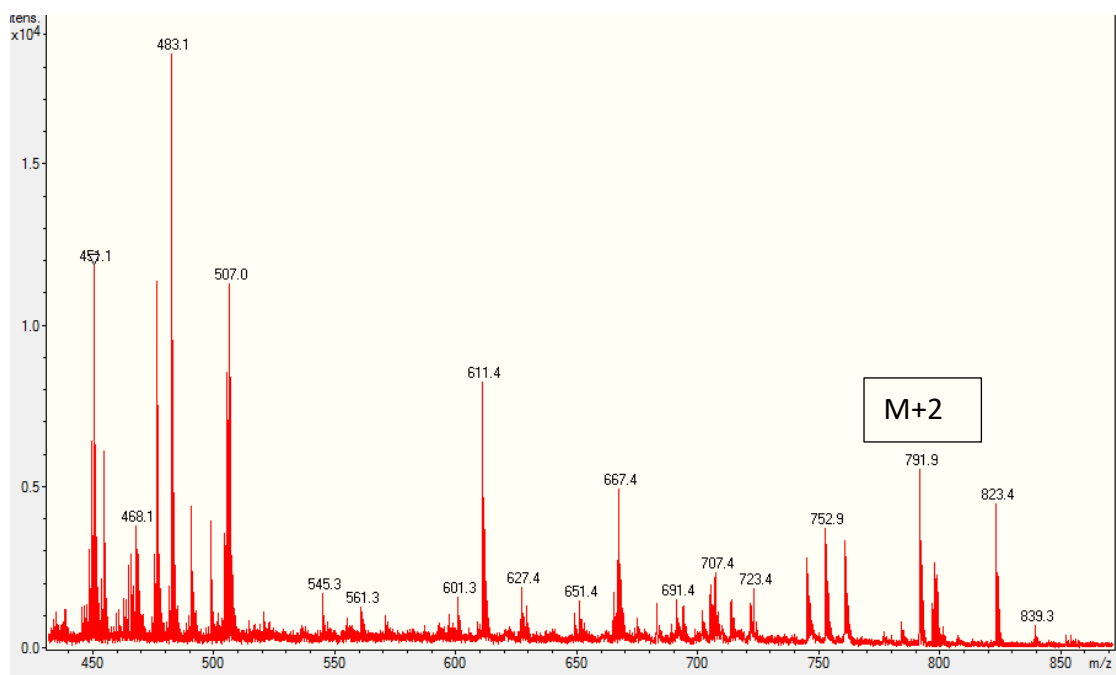


Figura 31: MS CALIX-[4]-4-Alq

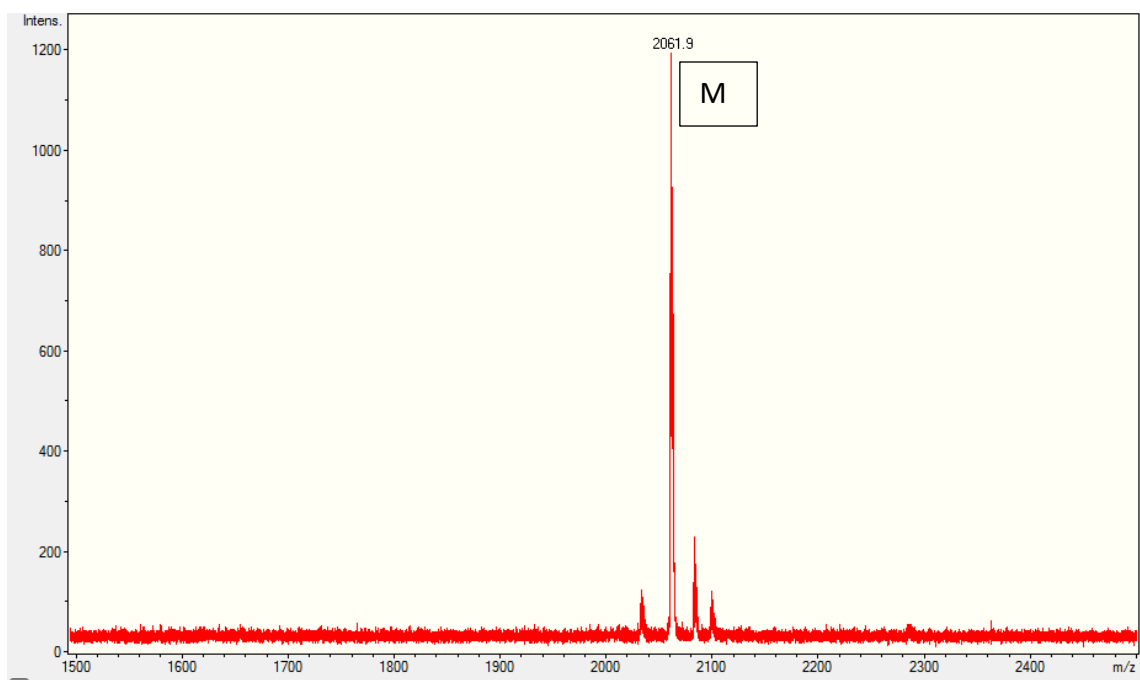


Figura 32: MS CALIX-[4]-C(10)-2-CHS

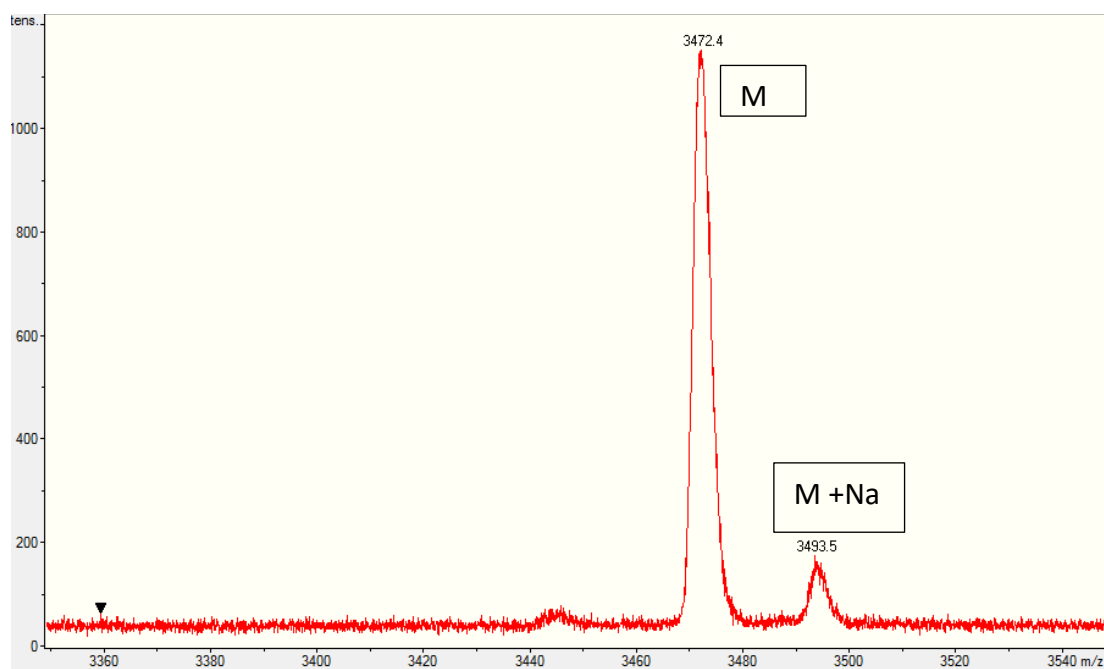


Figura 33: MS CALIX-[4]-C(10)-4-CHS

5. Análisis termogravimétrico (TGA):

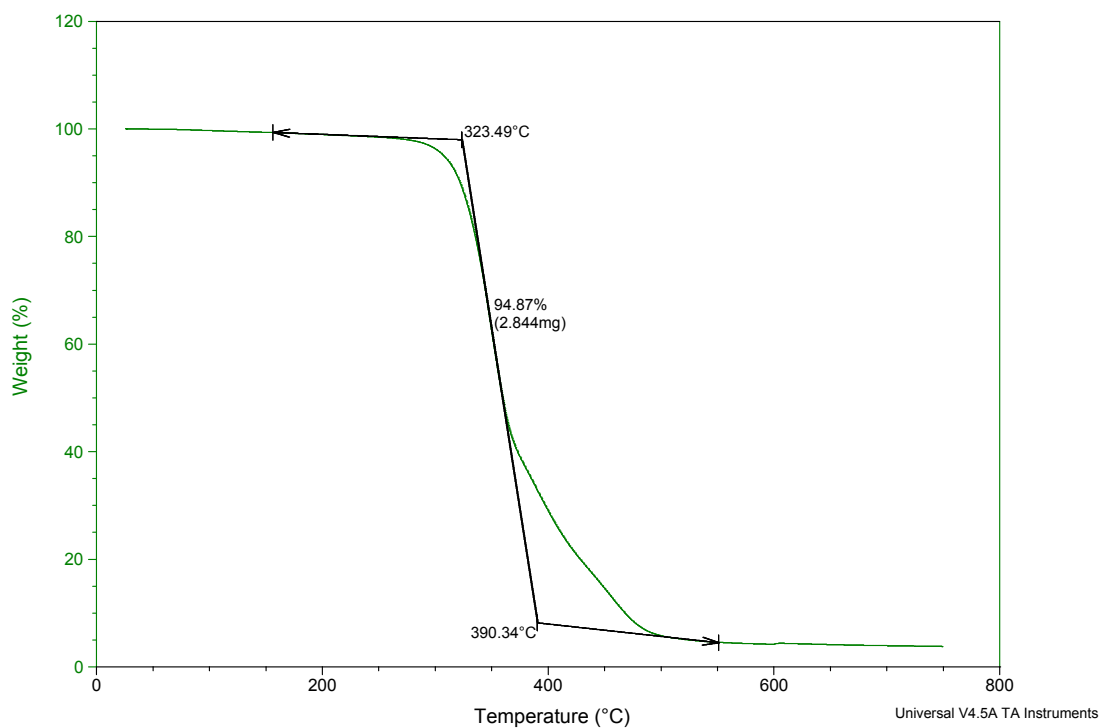


Figura 34: MS CALIX-[4]-C(10)-4-CHS

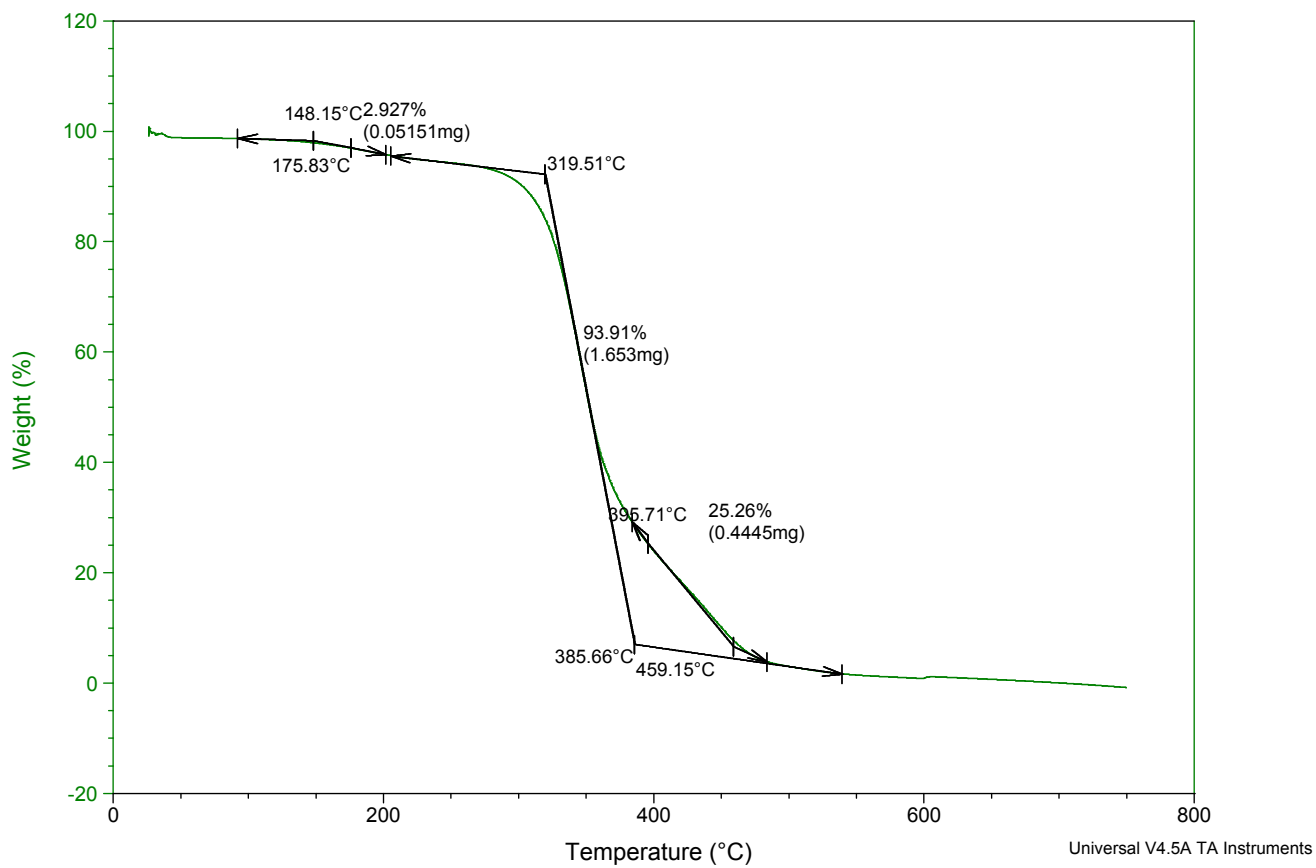


Figura 35: MS CALIX-[4]-C(10)-2-CHS

6. Microscopio óptico polarizado:

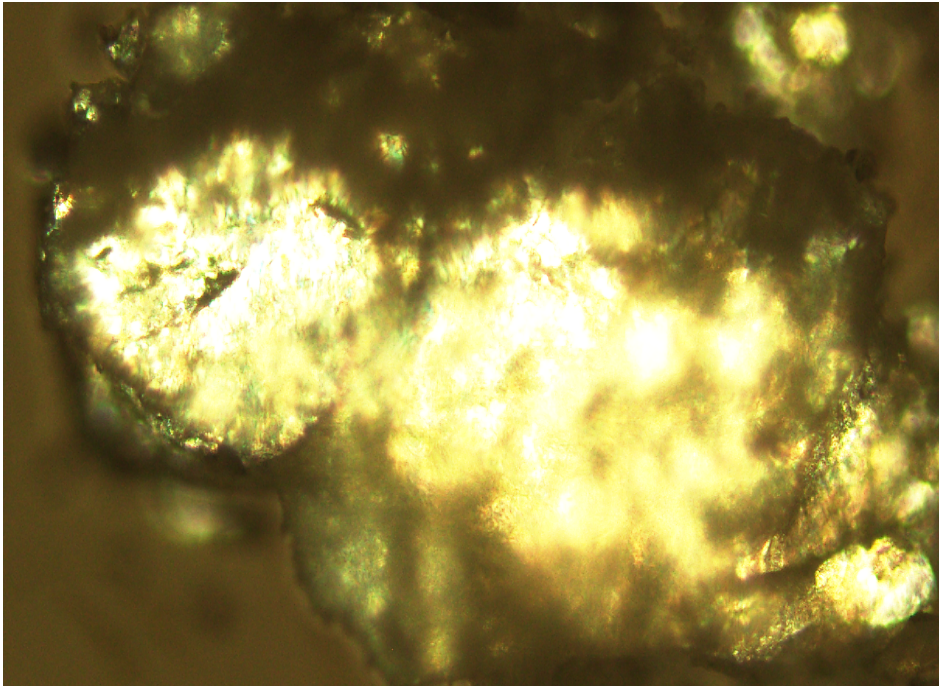


Figura 36: 51,7 °C 1º calentamiento 10x (estado cristalino)

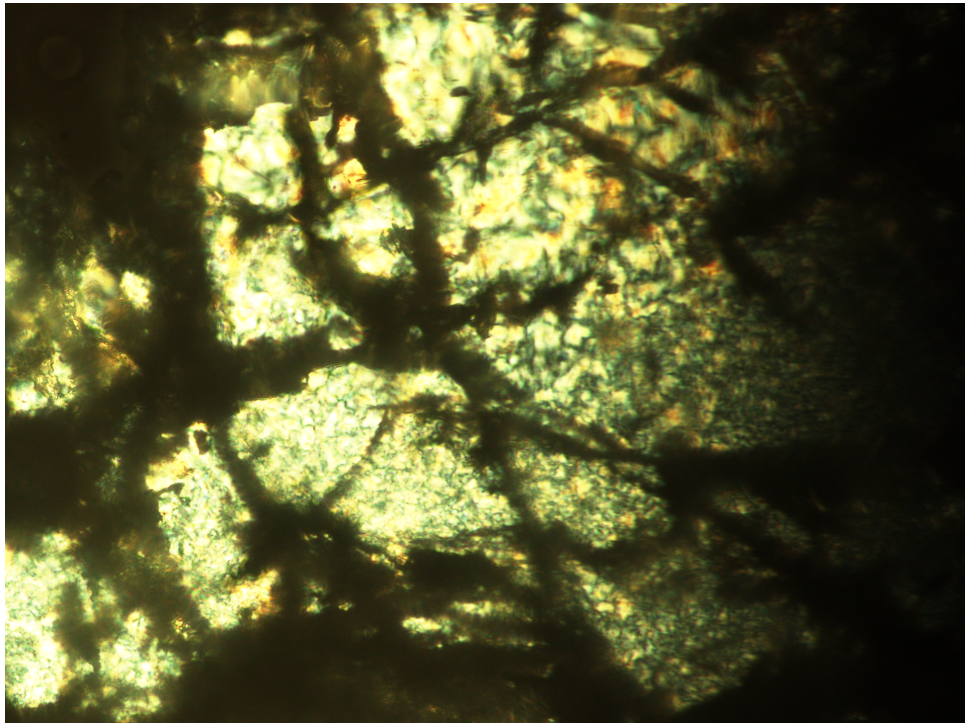


Figura 37: 90 °C 1º calentamiento 20x

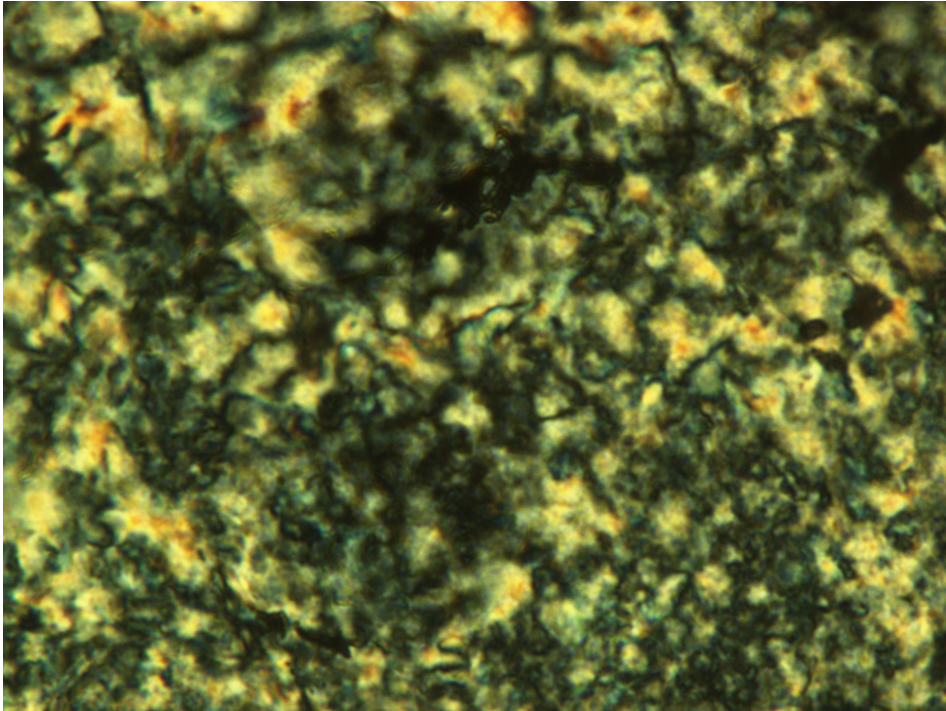


Figura 38: 100°C 1º calentamiento 50x

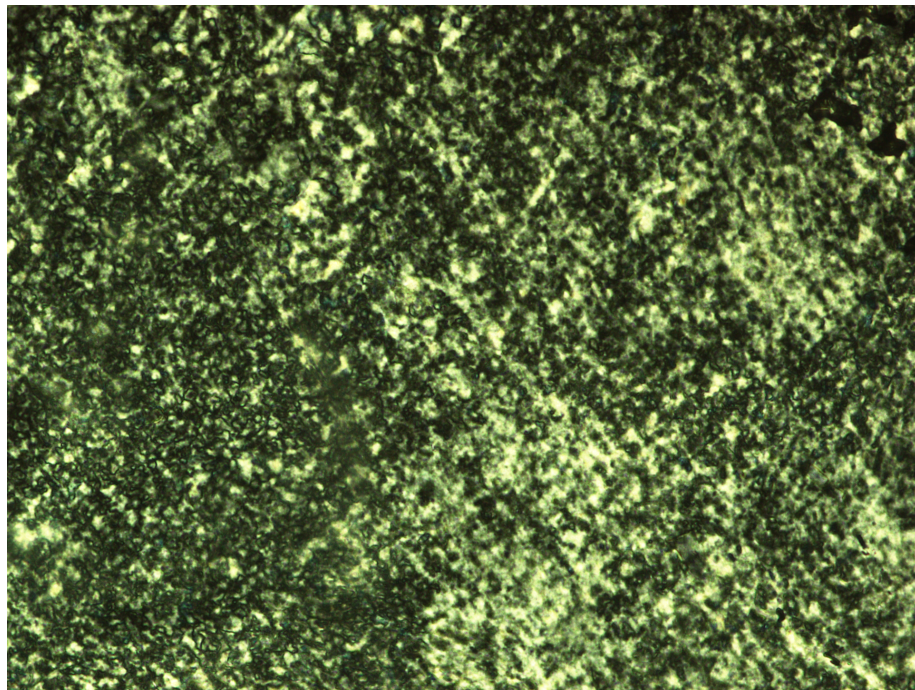


Figura 39: 120°C 1º calentamiento 50x

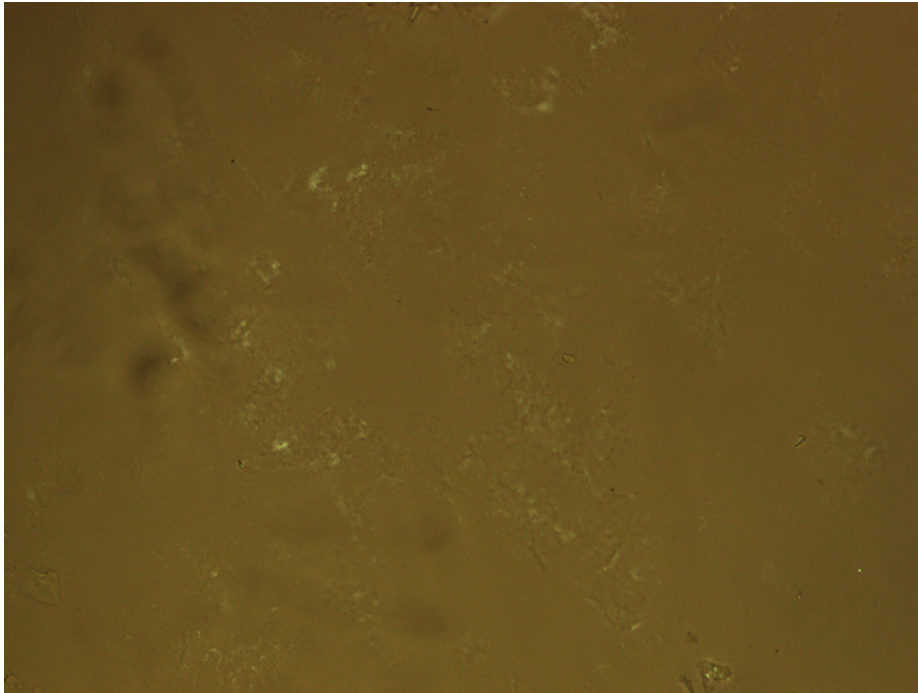


Figura 40: 133°C 1º calentamiento 20x (transición esméctico-isótropo)

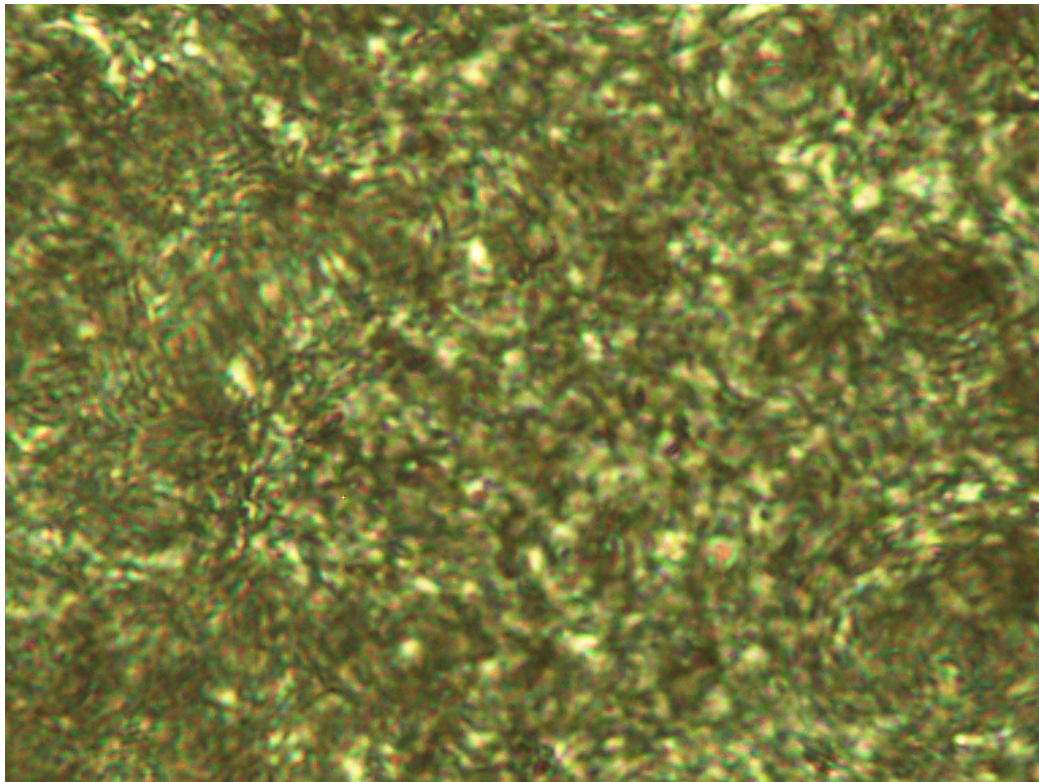


Figura 41: 95 °C 1º enfriamiento 50x

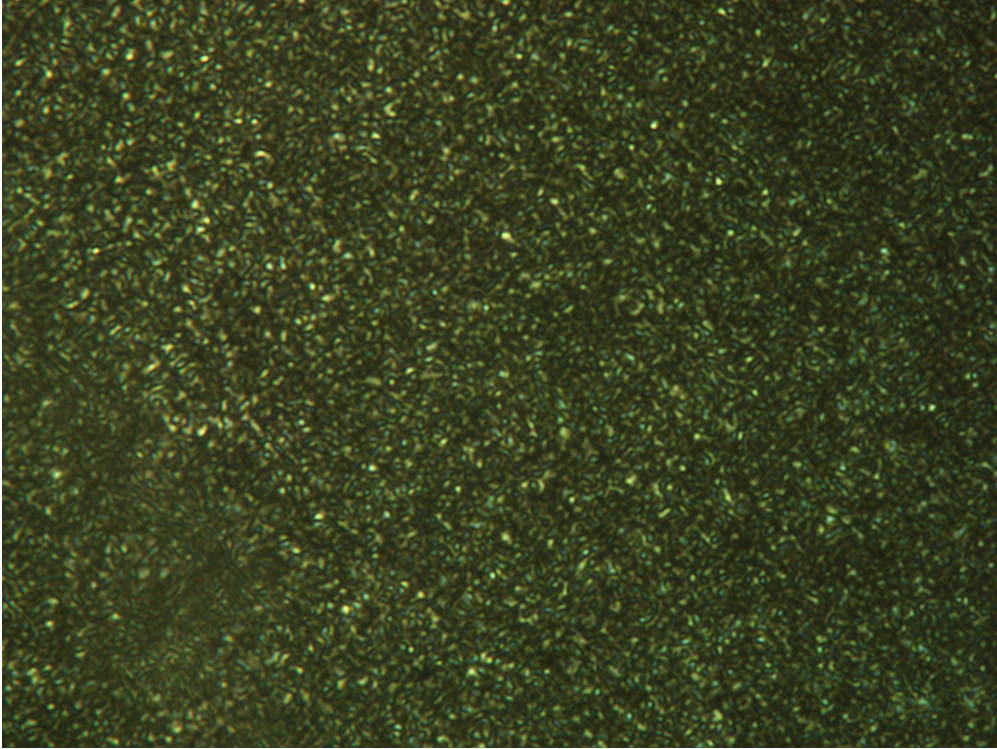


Figura 42: RT congelada la mesofase 10x

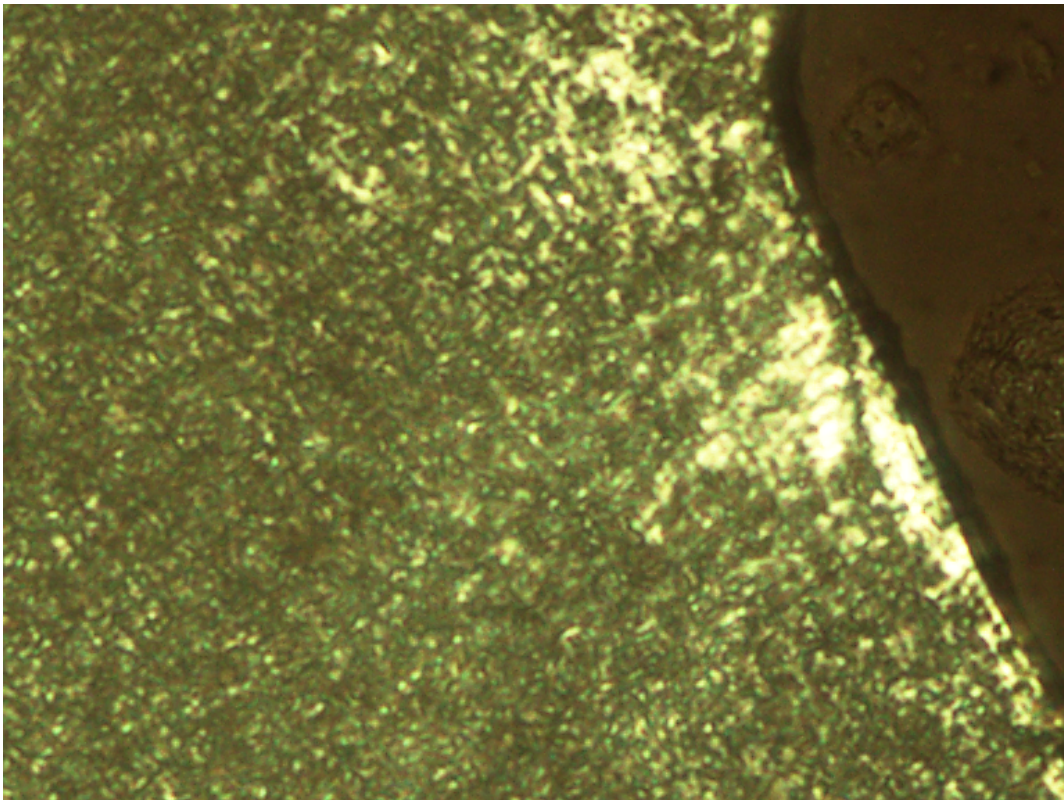


Figura 43: 2º calentamiento 100°C 20 x (en la fase cristal líquido)

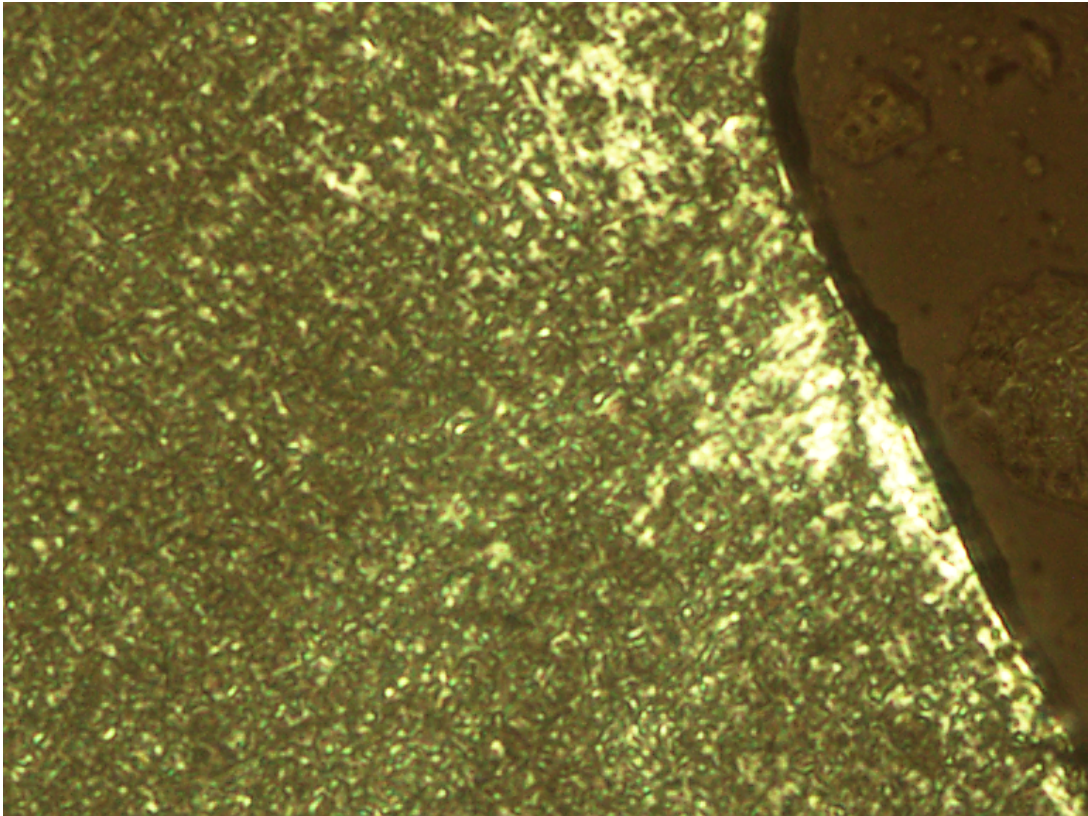


Figura 44: 2º calentamiento 126°C 20 x (en la fase cristal líquido)

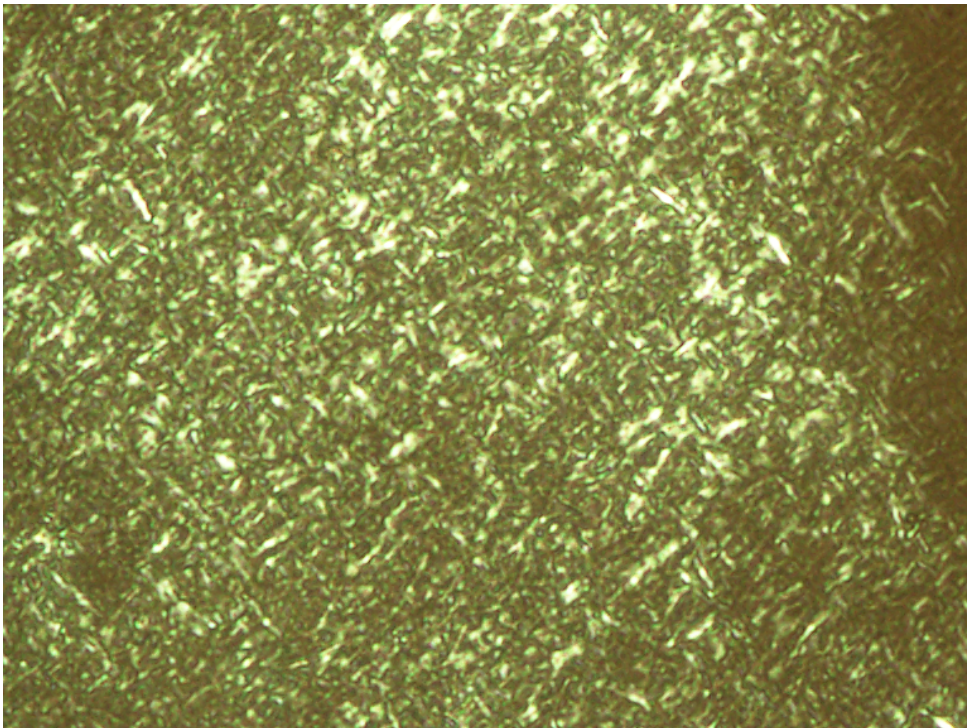


Figura 45: 2º enfriamiento 95°C 20 x

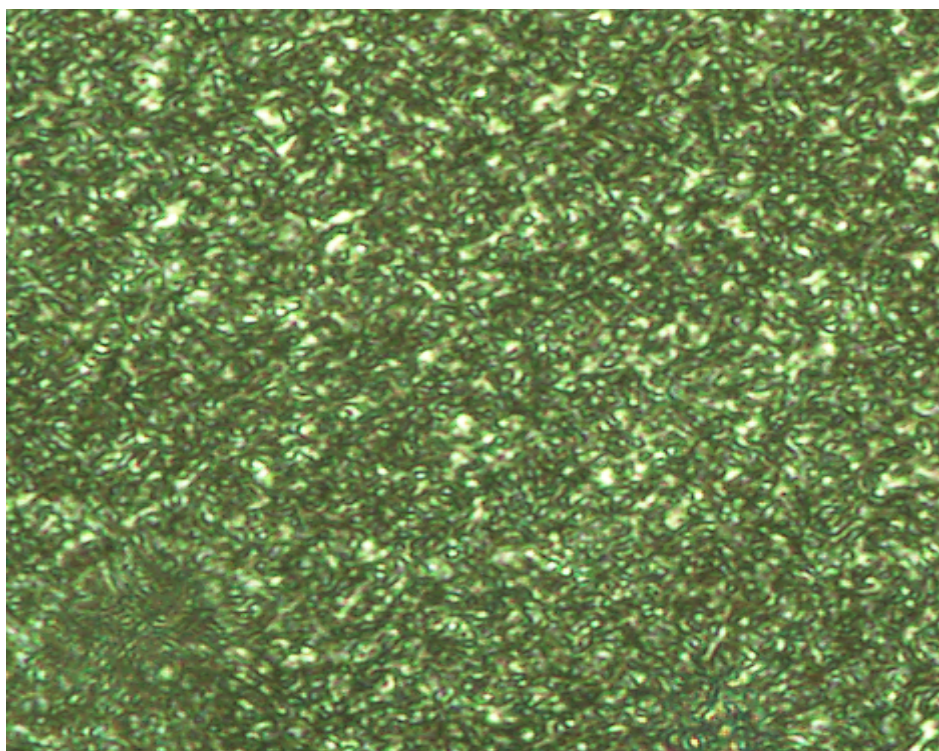


Figura 46: 2º enfriamiento 80°C 20 x