Formation of Oligomers in Secondary Organic Aerosol

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Supporting Information

Figure S1. Product ion spectrum of the 359 m/z precursor from dimerization of pinonaldehyde

Figure S2. A) Calculated m/z values and number of combinations for dimers produced by direct coupling of two monomers (primary ozonolysis products). B) Calculated m/z values and number of combinations for dimers proudcted by direct coupling of two monomers and trimers produced from one or two monomers in combination with two or one monomer decomposition products (Scheme 1b).

Figure S3. Mass spectrum of ambient aerosol collected at Research Triangle Park, NC

Figure S4. Product ion spectrum of the 359 m/z precursor from ambient aerosol collected at Research Triangle Park, NC

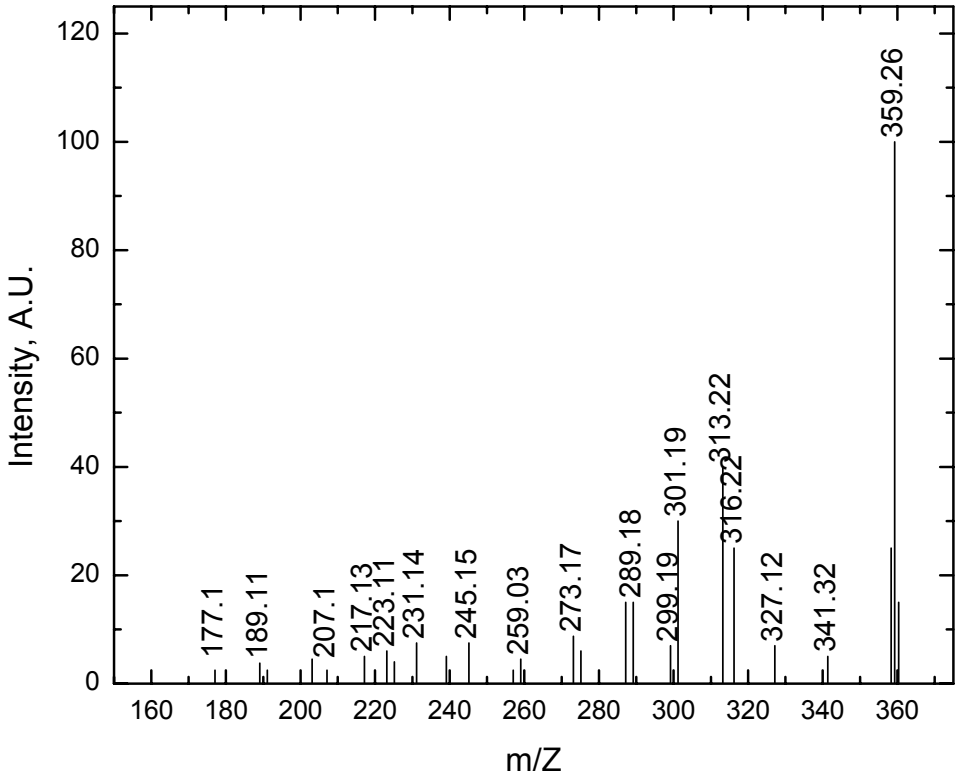
Intensity, A.U.
m/Z
0
20
40
60
80
100
120
160
180
200
220
240
260
280
300
320
340
360
177.1
189.11
207.1
217.13
223.11
231.14
245.15
259.03
273.17
289.18
299.19
301.19
313.22
316.22
327.12
341.32
359.26

Figure S1.

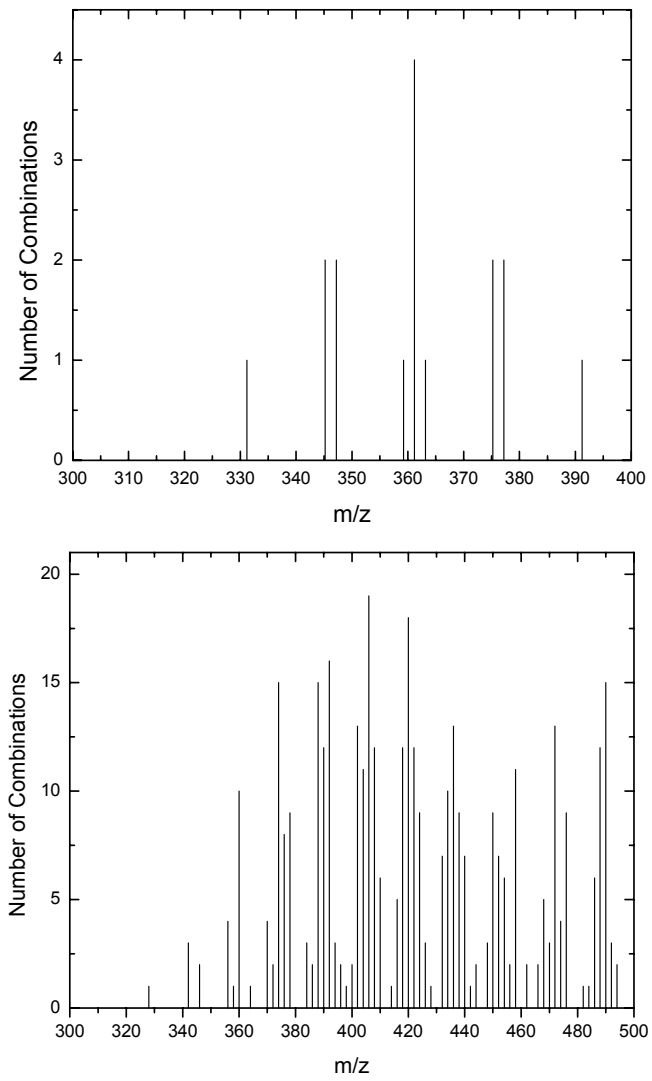

Figure S2.

#4

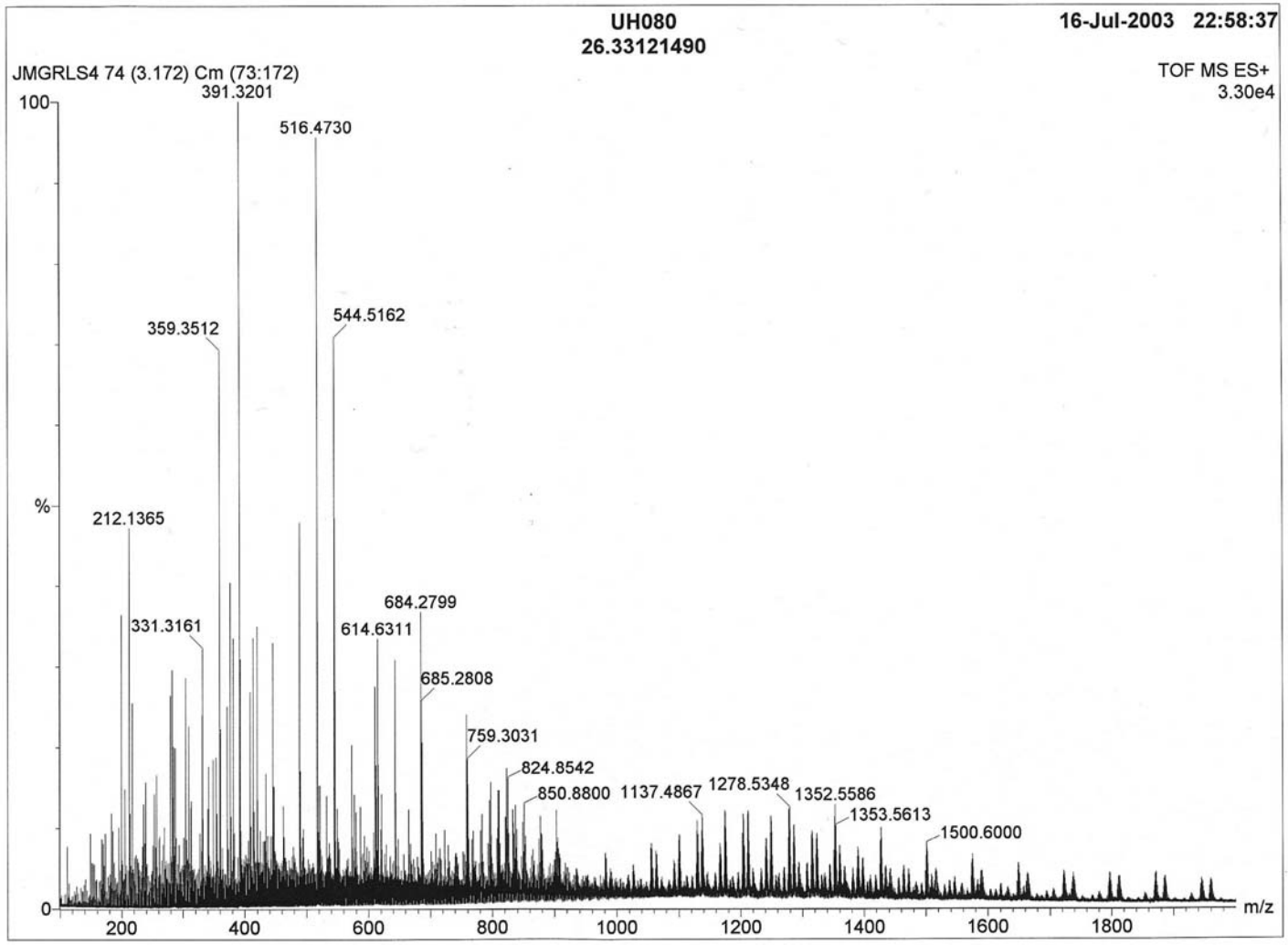
UH080
26.33121490
16-Jul-2003 22:58:37
JMGRLS4 74 (3.172) Cm (73:172)
TOF MS ES+
3.30e4
100
%
0
391.3201
516.4730
359.3512
544.5162
212.1365
331.3161
684.2799
614.6311
685.2808
759.3031
824.8542
850.8800
1137.4867
1278.5348
1352.5586
1353.5613
1500.6000
200
400
600
800
1000
1200
1400
1600
1800
m/z

Figure S3.

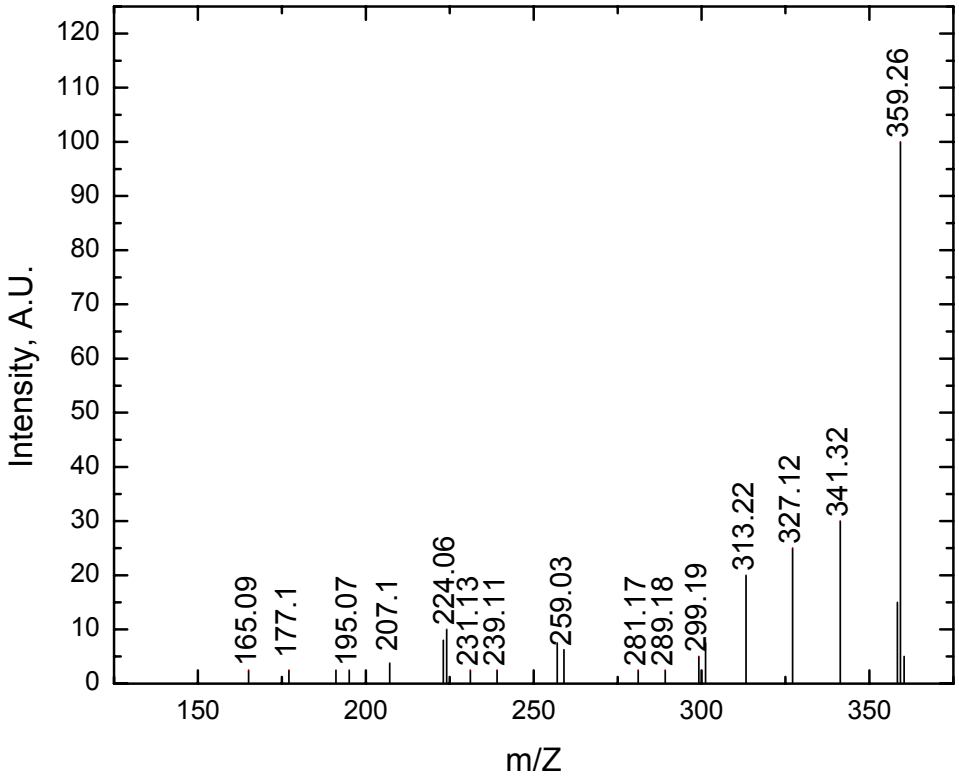
Intensity, A.U.
m/Z
0
10
20
30
40
50
60
70
80
90
100
110
120
150
200
250
300
350
165.09
177.1
195.07
207.1
224.06
231.13
239.11
259.03
281.17
289.18
299.19
313.22
327.12
341.32
359.26

Figure S4.